

Amphibious Landing Operations in World War II: Personal Experience in Applying and Developing Doctrine

A Monograph

by

**MAJ Mark Adam Jackson
United States Army**



**School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas**

2015-01

Approved for public release; distribution is unlimited.

| REPORT DOCUMENTATION PAGE | | | | <i>Form Approved OMB No. 0704-0188</i> |
|---|----------------------------------|---|--|--|
| <p>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.</p> | | | | |
| 1. REPORT DATE (DD-MM-YYYY) 21-05-2015 | 2. REPORT TYPE SAMS Monograph | 3. DATES COVERED (From - To) JUN 2014 - MAY 2015 | | |
| 4. TITLE AND SUBTITLE AMPHIBIOUS LANDING OPERATIONS IN WORLD WAR II: PERSONAL EXPERIENCE IN APPLYING AND DEVELOPING DOCTRINE | | | 5a. CONTRACT NUMBER | |
| | | | 5b. GRANT NUMBER | |
| | | | 5c. PROGRAM ELEMENT NUMBER | |
| 6. AUTHOR(S) Major Mark Adam Jackson, U.S. Army | | | 5d. PROJECT NUMBER | |
| | | | 5e. TASK NUMBER | |
| | | | 5f. WORK UNIT NUMBER | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) School of Advanced Military Studies 201 Reynolds Ave. Fort Leavenworth, KS 66027-2301 | | | 8. PERFORMING ORG REPORT NUMBER | |
| 9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301 | | | 10. SPONSOR/MONITOR'S ACRONYM(S) | |
| | | | 11. SPONSOR/MONITOR'S REPORT NUMBER(S) | |
| 12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release; Distribution is Unlimited | | | | |
| 13. SUPPLEMENTARY NOTES | | | | |
| 14. ABSTRACT <p>The United States Army and Navy conducted amphibious landing operations in multiple wars throughout their histories with varying levels of success. Early amphibious landing doctrine was a joint-effort between the services, but a divergence in purpose drove them apart prior to World War II. Soon after the United States entered the War, the Army and Navy would work together again, but the division in amphibious landing experience and doctrine was enough to cause concern among leaders. The Army had to meet the challenge of overcoming rapid expansion and a lack of institutional or personal experience in conducting large-scale amphibious operations. At the forefront of the Army's effort to gain experience planning and conducting amphibious landings was Lucian K. Truscott, Jr, a Cavalry officer by training. Following his assignment to the Combined Operations Headquarters, Truscott planned and led units in nearly every large-scale landing in the Mediterranean Theater of Operations from the brigade to corps level. Following World War II, he continued to influence amphibious landing doctrine. This monograph compares Truscott's personal experiences and the doctrine used by the Army to determine points of friction and explores the current lack of amphibious landing doctrine given the Army's history, potential threats, and future concepts.</p> | | | | |
| 15. SUBJECT TERMS <p>Amphibious Operations, Landing Operations, Lucian K. Truscott, Jr., Operation Torch, Operation Husky, 3rd Infantry Division, World War II</p> | | | | |
| 16. SECURITY CLASSIFICATION OF: | | 17. LIMITATION OF ABSTRACT (U) | 18. NUMBER OF PAGES 66 | 19a. NAME OF RESPONSIBLE PERSON |
| a. REPORT (U) | b. ABSTRACT (U) | | | c. THIS PAGE (U) |

Monograph Approval Page

Name of Candidate: MAJ Mark Adam Jackson

Monograph Title: Amphibious Landing Operations in World War II: Personal Experience in Applying and Developing Doctrine

Approved by:

_____, Monograph Director
Robert T. Davis, II, PhD

_____, Seminar Leader
James W. MacGregor, COL

_____, Director, School of Advanced Military Studies
Henry A. Arnold III, COL

Accepted this 22nd day of May 2015 by:

_____, Director, Graduate Degree Programs
Robert F. Baumann, PhD

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the US Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

Abstract

Amphibious Landing Operations in World War II: Personal Experience in Applying and Developing Doctrine at the School of Advanced Military Studies, by MAJ Mark Adam Jackson, 66 pages.

The United States Army and Navy conducted amphibious landing operations in multiple wars throughout their histories with varying levels of success. Early amphibious landing doctrine was a joint-effort between the services, but a divergence in purpose drove them apart prior to World War II. Soon after the United States entered the War, the Army and Navy would work together again, but the division in amphibious landing experience and doctrine was enough to cause concern among leaders. The Army had to meet the challenge of overcoming rapid expansion and a lack of institutional or personal experience in conducting large-scale amphibious operations.

At the forefront of the Army's effort to gain experience planning and conducting amphibious landings was Lucian K. Truscott, Jr., a Cavalry officer by training. Following his assignment to the Combined Operations Headquarters, Truscott planned and led units in nearly every large-scale landing in the Mediterranean Theater of Operations from the brigade to corps level. Following World War II, he continued to influence amphibious landing doctrine.

This monograph compares Truscott's personal experiences and the doctrine used by the Army to determine points of friction and explores the current lack of amphibious landing doctrine given the Army's history, potential threats, and future concepts.

Contents

| | |
|---|----|
| Acronyms | v |
| Figures | vi |
| Introduction | 1 |
| Part 1. The Evolution of Amphibious Landing Doctrine | 6 |
| Part 2. Amphibious Operations and Lucian K. Truscott, Jr..... | 15 |
| Part 3. Operation Torch..... | 22 |
| Part 4. Operation Husky | 36 |
| Conclusion..... | 50 |
| Bibliography..... | 57 |

Acronyms

| | |
|-------|-------------------------------------|
| ADP | Army Doctrine Publication |
| C&GSC | Command and General Staff College |
| COHQ | Combined Operations Headquarters |
| ETO | European Theater of Operations |
| FLEX | Fleet Landing Exercise |
| FM | Field Manual |
| FTP | Fleet Training Publication |
| JOAC | Joint Operational Access Concept |
| JP | Joint Publication |
| LCT | Landing Craft - Tank |
| LST | Landing Ship – Tank |
| MTO | Mediterranean Theater of Operations |
| RCT | Regimental Combat Team |

Figures

| | | |
|---|-------------------------------|----|
| 1 | Taking Port Lyautey | 29 |
| 2 | The Seventh Army Assault..... | 44 |

Introduction

Like the statesman, the soldier has to steer between the danger of repeating errors of the past because he is ignorant that they have been made, and the danger of remaining bound by theories deduced from past history although changes in conditions have rendered these theories obsolete.

—Sir Michael Howard

Throughout history, states projecting power from the sea to foreign shores has been a frequent theme. An Egyptian king conducted the first recorded amphibious operation at least thirty-five centuries ago and the history of the Mediterranean is full of similar operations.¹ Thucydides' account of Athens defeating of Spartan forces on the island of Sphacteria illuminates the utility and familiarity ancient militaries had with this method of warfare.² If they were well planned and executed, amphibious landings afforded attackers the element of surprise. However, defending forces could easily thwart victory by thorough preparation.

The United States Army and Navy conducted their first joint operation during the landing of American forces near the city of Vera Cruz on the eastern coast of Mexico in 1846. The Army initially intended to execute the landing alone, but General Winfield Scott solicited the help of the Navy and Commodore David Conner. Using a combined staff and detailed planning, the landing occurred efficiently and successfully, reinforcing, in American minds, the utility of such methods.³ The Civil War provides many examples of the use of amphibious landings, primarily by the United States Army against the Confederate Army, with varying levels of success and failure.

The most successful amphibious landing by the Union Army during the Civil War was

¹ Arch Whitehouse, *Amphibious Operations* (Garden City: Doubleday and Company, 1963), i.

² Robert B. Strassler, *The Landmark Thucydides: A Comprehensive Guide to the Peloponnesian War* (New York: Simon and Schuster, 1998), 240-244.

³ Ibid., 103-104.

the second attack against Fort Fisher, near the Cape Fear River in North Carolina, in January 1865. Again, using combined planning and coordination between the Army and Navy, this operation proved successful in achieving its desired aims. However, these improvements in combined operations proved short lived as the Army lost organizational and personal experience. Almost three and a half decades later, the United States invaded Cuba with no coordination between Army and Navy.⁴ Using only two words to describe the landing, Theodore Roosevelt, former Assistant Secretary of the Navy and commander of the Rough Riders during the landing, described the operation as “higgledy-piggledy.”⁵

Amphibious landing operations have a firm foundation in the history of warfare and, more particularly, in the history of American warfare. The paragraphs above provide examples of the utility of amphibious landings during warfare and the cost of forgetting those lessons. These lessons led to the Army and Navy initially conducting improvements together. However, the service’s viewpoints for conducting amphibious landings eventually drove them apart. The Army viewed amphibious landings as the initial phase of a longer land campaign. The Navy and its subordinate arm, the Marine Corps, viewed amphibious landings as a means to increase the operational reach of a fleet. The doctrine each developed trended in those directions. World War II, however, forced the services to conduct joint operations toward common strategic objectives. This monograph explores the evolution of Army doctrine for conducting amphibious landing operations and shows the adaptations made to counter challenges landing forces faced.

The Army conducted numerous amphibious operations during World War II in the Pacific, Mediterranean, and European Theaters of Operation. The highpoint of these operations in the European Theater of Operations (ETO) was Operation Neptune, the landings along the Normandy coast, on June 6, 1944. The experiences of the Mediterranean Theater of Operations

⁴ Strassler, 117-119.

⁵ Theodore Roosevelt as quoted in Jack C. Lane, *Armed Progressive: General Leonard Wood* (Lincoln: University of Nebraska Press, 1978), 39.

(MTO) over the previous year and a half, beginning with Operation Torch in November 1942, built the foundation for the success of Neptune. Although not the first amphibious landing operation conducted by the United States in World War II, Torch was the first large-scale amphibious landing operation conducted by the Army in nearly fifty years. Furthermore, the amphibious landing doctrine used was less than a year old. The differences between the doctrine used by the Army and that used by the Navy, despite being of similar origins, proved different enough in its application to cause considerable issues. The Army and Navy overcame points of friction by gaining familiarity with each other through training, personal, and organizational relationships. This is apparent in the success of Operation Husky in Sicily, Operation Shingle in Anzio, and Operation Dragoon in southern France.

The personification of the Army's amphibious landing experiences during World War II in the MTO is in Lucian K. Truscott, Jr. After enlisting and completing initial entry training, the Army selected Truscott to receive a commission as a provisional second lieutenant of cavalry in the rapidly expanding US Army during World War I.⁶ Truscott remained in cavalry units for nearly his entire pre-World War II career.⁷ Truscott's only experience in naval affairs during this period was a brief assignment to Hawaii, to and from which he traveled by ship. During an assignment to Fort Lewis, Truscott became acquainted with then-Colonel Dwight Eisenhower, with whom he interacted and held in high regard.⁸ Following the attack on Pearl Harbor, and while in command of a cavalry regiment at Fort Bliss, Texas, the Assistant Chief of Staff (G-3) of Army Ground Forces, Brigadier General Mark Clark, personally notified Truscott that his services were required in Washington, DC, for immediate deployment overseas to an unknown

⁶ Wilson A. Heffner, *Dogface Soldier: The Life of Lucian K. Truscott, Jr.* (Columbia: University of Missouri Press, 2010), 12.

⁷ Ibid., 13.

⁸ Ibid., 34.

location.⁹ This assignment led to Truscott's personal involvement as a planner and leader in almost every major amphibious landing operation in the MTO and led to his shaping the Army's amphibious landing doctrine following the war.

Given Truscott had almost no personal experience with amphibious landings it is reasonable to conclude that he gained a cursory knowledge of the subject by learning its associated doctrine. At the time, the role and purpose doctrine played was similar to today. Army Doctrine Publication (ADP) 1-01, *Doctrine Primer*, defines doctrine as “fundamental principles, with supporting tactics, techniques, procedures, terms, and symbols, used for the conduct of operations and which the operating force, and elements of the institutional Army that directly support operations, guide their actions in support of national objectives.”¹⁰ Much of the focus of this monograph is the application and development of the Army’s amphibious landing doctrine in its earliest form and the role of individual experience in shaping it.

This monograph surveys the development of the Army’s amphibious landing doctrine in conjunction with the Navy. It then covers Truscott’s early career, including his formative experiences on the British Combined Operations Headquarters (COHQ) staff. Following this, there is a consideration of his personal experiences in planning and observing amphibious operations with British forces prior to analyzing two case studies. The first case study reviews the planning and preparation for the amphibious landing of Sub-Task Force Goalpost, the northern-most unit of the invasion of French Morocco during Operation Torch. The second case study reviews the planning and preparation for the amphibious landing of JOSS Force, the western-

⁹ For further bibliographical information on the early life of Lucian K. Truscott, Jr., see Wilson A. Heffner, *Dogface Soldier: The Life of Lucian K. Truscott, Jr.* (Columbia: University of Missouri Press, 2010); and H. Paul Jeffers, *Command of Honor: General Lucian Truscott’s Path to Victory in World War II* (New York: NAL Caliber, 2008). Truscott also wrote an autobiography, *Command Missions: A Personal Story* (New York: E.P. Dutton and Company, 1954) focusing on his World War II experience. Truscott’s personal papers are currently located at the George C. Marshall Research Library in Lexington, Virginia.

¹⁰ Army Doctrine Publication (ADP) 1-01, *Doctrine Primer* (Washington, DC: Department of the Army, 2014), 1-2.

most unit in the invasion of Sicily in Operation Husky. Truscott led each and faced similar challenges while doing so. There were differences, however, in how Truscott overcame those challenges. These differences were primarily regarding joint Army-Navy training and coordination either in concurrence with, or in spite of, the doctrine in use at the time. Lastly, there is an overview of institutional movements within the Army, during and after World War II, to capitalize on and capture amphibious landing experiences for integration into doctrine and future use.

Part I

The Evolution of Amphibious Landing Doctrine

The aforementioned assessment of amphibious operations by Theodore Roosevelt after Cuba made an impact on the leadership of the Army and Navy, with each undertaking independent efforts to correct the deficiencies made apparent during the Spanish-American War. However, recognizing the need to cooperate fully, the service chiefs agreed to form the Joint Army and Navy Board in 1903.¹¹ Though having no executive functions or command authority, this standing board provided a forum for appointed members of the General Staff of the Army and General Board of the Navy to make recommendations to service secretaries to enhance future cooperation.¹² Over the next two decades, the Army and Navy used this board to develop the foundation for amphibious operations doctrine. Many of the issues discussed by the board included issues regarding what service would be in command of amphibious assaults, with influence initially in favor of the Army commander, but moving decisively to the naval commander.¹³ This issue of command, particularly once ashore, would remain divisive and prove detrimental to the relationship between the Army and Navy. Command relationships were not satisfactorily resolved until the 1940s.

During World War I, neither the Army nor the Navy participated in any amphibious landing operations. Both the Army and Navy studied the failed Dardanelles operation, an influential event in regards to the ship-to-shore movement troops and equipment.¹⁴ The issue of

¹¹ William F. Atwater, “United States Army and Navy Development of Joint Landing Operations, 1898-1942” (PhD diss., Duke University, 1986), 17.

¹² Louis Morton, “Interservice Co-operation and Political-Military Collaboration,” in *Total War and Cold War: Problems in Civilian Control of the Military*, ed. Harry L. Coles (Columbus: Ohio State University Press, 1962), 133.

¹³ Atwater, 23-25.

¹⁴ A search of the “Command and General Staff School Student Papers, 1930-1936” on the Ike Skelton Combined Arms Research Library website for the keywords “Gallipoli” or

command during a landing operation arose during a joint training exercise on Hawaii in 1925.¹⁵

The Joint Board resolved these issues, as well as many others, in 1927, through the publication of *Joint Action of the Army and the Navy*.

The purpose of *Joint Action of the Army and the Navy* was to promote effective coordination by consolidating all policies, agreements, and instructions into one source.¹⁶ Divided into two parts, the first part outlines the policies that govern joint Army and Navy activities, while the second part describes different ways to apply these policies. The first chapter described the common missions of the services, where the separation occurs, as well as outlining the specific functions of the Army, Navy, and Marine Corps. The common mission of the Army and Navy is described as to occur “conjointly and in cooperation” with the Army performing functions “that normally pertain to land operations” and the Navy performing functions “that normally pertain to sea operations.”¹⁷ The general functions of each service characterize the specific functions, with reference to each other when discussing overseas operations against hostile forces.

The first part’s second chapter made a clear distinction between two acceptable forms of command during joint operations and the circumstances to apply either. The first form, “paramount interest,” stated that the “authority and responsibility for the coordination are vested in the commander of the force whose function and requirements are, at the time, of the greater importance.”¹⁸ The remainder of the chapter explained the roles and responsibilities of each commander during the operation, as well as who decides which service has paramount interest,

“Dardanelles” returns seventy-four results out of 960 available monographs written during that period.

¹⁵ Atwater, 56-59.

¹⁶ *Joint Action of the Army and the Navy* (Washington, DC: United States Government Printing Office, 1927), iv.

¹⁷ Ibid., 1-2.

¹⁸ Ibid., 4.

but it did not discuss when or where this relationship ceased during an operation. The second form of coordination described is “unity of command.” *Joint Action* stated that the President, as Commander in Chief, may delegate this authority and that the commander exercising this method “shall have a headquarters separate and distinct from those of the commanders of forces of the two services, and shall deal with these forces as coordinate elements of his command.”¹⁹ War plans were required to state the type of coordination method in use during each phase of a campaign.²⁰

Joint Action was a step forward in the conduct of joint amphibious operations. There was still some disagreement as to what type of coordination was the most effective and whether to create a definitive doctrinal manual on the topic. In 1929, the Joint Board published the *Joint Overseas Expeditions* pamphlet, designed to “apply primarily to joint operations of considerable forces of both the Army and Navy, involving landings against opposition.”²¹ The publication of the pamphlet was the impetus for the first joint landing exercises in Hawaii in 1932. This was the first such exercise undertaken in nearly a decade. This exercise ended in failure, both as a result of poor training prior to the exercise and due to lack of coordination between the landing force and supporting naval force.²² The result demonstrated that further work was needed to accomplish landings and in the development of specialized landing craft. Both of these areas were acknowledged by the Army and Navy.

Because of the 1932 exercise and subsequent recommendations to the 1929 *Joint Overseas Expeditions* draft received from Army and Navy officers, the Joint Board published a

¹⁹ *Joint Action* (1927), 5.

²⁰ *Ibid.*, 6.

²¹ *Joint Overseas Expeditions – Tentative* (November 14, 1929). Quoted in William F. Atwater, “United States Army and Navy Development of Joint Landing Operations, 1898-1942” (PhD diss., Duke University, 1986), 66.

²² Atwater, 70.

new pamphlet retaining the same name. The 1933 *Joint Overseas Expeditions* pamphlet went into greater technical detail on the execution of amphibious landing operations. It also provided specific instructions to both services regarding organizational and equipment requirements.²³ There was additional emphasis placed on the planning of joint amphibious landing operations in recognition of the importance of cooperation between the Army and Navy staffs. Lastly, the *Joint Overseas Expeditions* pamphlet included a new definition section, providing a common language for use by the services.²⁴

Following the publication of the *Joint Overseas Expeditions* pamphlet in 1933, the Marine Corps published its own landing operations manual, the *Tentative Landing Operations Manual* in 1934. The Marine Corps created the manual to move beyond the inter-service nature of the *Joint Overseas Expeditions* pamphlet and develop detailed intra-service doctrine. Additionally, the publication of the manual coincided with the formation of the Fleet Marine Force, a standing body of Marines with the training and equipment required to support the expeditionary requirements of the Navy.²⁵ Following a brief period for recommendations and revisions, the Marine Corps published a second edition in 1935. The *Tentative Manual* was not joint in nature, but written purely from a Marine Corps and Navy perspective. From this perspective, the manual retained control of ship-to-shore operations under a single commander throughout the operation.²⁶ The *Tentative Manual* also covered, in detail, the importance of logistics and the necessity to combat load equipment, making it immediately available when needed. The Navy had previously advocated this concept in the initial edition of the *Joint Overseas Expeditions* manual in 1929; the added emphasis included assigning a Marine officer to

²³ Atwater, 72.

²⁴ Ibid., 73-74.

²⁵ John A. Lorelli, *To Foreign Shores: Amphibious Operations in World War II* (Annapolis: Naval Institute Press, 1995), 13.

²⁶ Atwater, 80-81.

be responsible for the loading of each ship.²⁷

The Navy and Army, to different degrees, exercised the evolution and improvement of landing operations doctrine in a series of annual events designed to confirm proposed concepts. These exercises also determined training deficiencies and captured the requirements of both naval and landing forces. The Fleet Landing Exercises (FLEX) occurred annually between 1935 and 1941, with the Army observing or actively participating in the first four. Among the deficiencies noted were poor naval gunnery skills in support of landing forces, the poor integration of airplanes, the importance of effective communication systems, and the need for improved landing craft.²⁸ During FLEX 1 in January 1935, the Army provided five officers as observers. It increased the number of observers the following year to twenty observers for FLEX 2.²⁹ FLEX 3 and 4 saw an increase in active Army participation, with nearly 800 participating in the former and 600 in the latter.³⁰ Despite continuing interest in landing operations and the growing inevitability of conflict in the Pacific against the Japanese, the Army had still not published its own doctrine nor would it participate in future joint training exercises after those in 1938.

The lack of continued participation may have been a result of a disagreement between the Chief of Naval Operations, Admiral William Leahy, and the Chief of Staff of the Army, General Malin Craig, over the Army's need to continue receiving training. In response to General Malin's request in the summer of 1938, Admiral Leahy replied:

I consider joint operations are of a major type and therefore do not belong in the opening phase of a war. This first, or opening phase, it is believed, will be purely naval in character, involving the seizure of temporary bases in the immediate theater of fleet operations. It is essential that naval forces, including the Fleet Marine Force, perfect the

²⁷ Atwater, 83.

²⁸ Lorelli, 15-16.

²⁹ Holland M. Smith, "The Development of Amphibious Tactics in the U.S. Navy, Part IV: Training, Experiment, Six Fleet Landing Exercises – 1931-1942," *Marine Corps Gazette* 30, no. 9 (September 1946): 43-44.

³⁰ Ibid., 45.

doctrines and techniques of such operations.³¹

This response is an indication of the Navy and Marine Corps perception of the Army's future role in amphibious operations.³² Despite General Craig's desires and the changing landscape in world affairs during this period, the Army War College only devoted three lecture hours to amphibious operations in 1940.³³ Students at the Army War College between 1934 and 1937 were, however, already considering the possibility of a two-ocean war with Japan and Germany as potential opponents.³⁴

Coinciding with the tense relationship between service chiefs was the Navy's publication of its own amphibious landing doctrine. Maintaining the momentum achieved following the publication of the *Tentative Manual* in 1935, the Navy produced its definitive manual on amphibious landing operations. The Navy published Fleet Training Publication (FTP) 167, *Landing Operations Doctrine*, in 1938 to supersede the *Tentative Manual*. It also contained lessons learned during the on-going Fleet Landing Exercises. Covering all aspects of the landing process, the manual is a clear indication of the institutional ownership the Navy and Marine Corps assumed over amphibious landing operations.³⁵ In 1940, the Army again requested support from the Navy to assist in amphibious landing training. However, a half-hearted performance by the naval component during the exercises lessened desires to conduct joint training in the future.³⁶

³¹ Smith, 46.

³² Atwater, 117.

³³ Lorelli, 18.

³⁴ Additionally, this marked the first consideration of a "Germany-first" strategy. Many of the 1940 graduates of the Army War College were assigned directly to the War Plans Division of the War Department General Staff. Henry G. Gole, *The Road to Rainbow: Army Planning for Global War, 1934-1940* (Annapolis: Naval Institute Press, 2003), xix.

³⁵ Field Training Publication (FTP) 167, *Landing Operations Doctrine* (Washington, DC: Office of Naval Operations, Division of Fleet Training: 1938), IX-X.

³⁶ Atwater, 124.

Following Japanese aggression in the Pacific and Germany's invasions of Poland, the Low Countries, and France, the probability of the United States entering the war steadily increased. In 1941, the Navy procured additional troop transports and cargo ships, and formed the First Joint Training Force to continue amphibious training off the coast of North Carolina.³⁷ It was also during this period that the Army published Field Manual (FM) 31-5, *Landing Operations on Hostile Shores*, with only service-specific changes made to the Navy's *Landing Operations Manual*.³⁸ When the United States entered World War II, both services had amphibious landing doctrine that reflected the outlooks of the respective service.

The Army publication of FM 31-5 in June 1941, exhibited a divergence between the War Department and the Department of the Navy in the conduct of amphibious landing operations. The Army was continually dissatisfied with the Navy's system of amphibious landing training. Until early 1942, this dissatisfaction caused further separation between the services.³⁹ Reflecting on the amphibious landing training conducted by the 3rd Infantry Division, Major General John P. Lucas, the division's Commanding General, and Lieutenant Colonel Floyd L. Parks, the Army Ground Forces Deputy Chief of Staff, submitted a memorandum to the Chief of Staff with several considerations. These included:

(1) The structure for amphibious training at the time the 3d Division was being trained was "unwieldy, ineffective, and dangerous." (2) The planning, preparation, and training for amphibious operations up to that time had been so deficient that a real operation against a competent enemy could end only in disaster for American forces. (3) The prevailing Army-Marine set-up was unsound because only the Army had both the means and the grasp of the problem to plan, prepare, and train the necessary ground and air forces for joint amphibious operations on the scale envisaged.⁴⁰

The divergent views of the services, particularly involving the scale and duration of operations

³⁷ Lorelli, 24-25.

³⁸ Atwater, 146.

³⁹ Marshall O. Becker, *The Amphibious Training Center: Study Number 22* (Washington, DC: Historical Section, Army Ground Forces, 1946), 1.

⁴⁰ Becker, 1.

occurring after an amphibious landing had come to a head. The Navy and Marine Corps' need to seize only small amounts of territory to extend naval power was not compatible with the Army's mission of conducting prolonged land campaigns. As a recommendation to remedy deficiencies in training, Lieutenant Colonel Parks advocated that the Army abandon the existing Army-Marine Amphibious Corps set-up and take responsibility for the planning, preparation, and training required to conduct large-scale amphibious operations.⁴¹ The Navy received these views with a divided response. One group believed that amphibious landing operations were an unnecessary diversion of scarce manpower and that the Army could assume as much of responsibility it wanted. Another group believed the Army was usurping the Navy in conducting purely naval functions.⁴²

On May 12, 1942, as a reaction to these recommendations and long-standing issues in amphibious landing training, the Army Ground Forces activated the Amphibious Training Command, later re-designated the Amphibious Training Center, despite objections from the Navy. The mission of the Amphibious Training Center was to train twelve Army divisions, eleven infantry and one armored, before February 1, 1943.⁴³ The Army eventually lessened the requirements of the Center to train five divisions. The Center's cadre of officers had previously served with either the 1st, 3rd, or 9th Infantry Divisions, divisions with previous training as part of Amphibious Corps Pacific Fleet or Amphibious Corps Atlantic Fleet.⁴⁴

In addition to its task of conducting division-level amphibious training, the Amphibious Training Center was also responsible for developing associated doctrine. The official history of the Amphibious Training Center claimed this was problematic, especially when discussing shore-

⁴¹ Becker, 1.

⁴² Lorelli, 41.

⁴³ Becker, 5.

⁴⁴ Ibid., 31.

to-shore landings, because of the existence of “very little concrete doctrine or principles on which to base its activities.”⁴⁵ The 1941 version of FM 31-5 focused solely on ship-to shore landings, as did the third change to FTP 167, also published in 1941. This doctrine provided the Center with a point of departure for further development.

In addition to doctrinal deficiencies, the Center was also chronically short of personnel for demonstration purposes, as well as the necessary equipment to train units. During this period of Army-driven amphibious landing training, there was still considerable dialogue between the Army and Navy concerning which service should be the proponent organization. In March 1943, the Navy regained responsibility for training amphibious landing operations. The Amphibious Training Center closed in June 1943, having trained four Army divisions and numerous separate battalions.⁴⁶

The creation of the Amphibious Training Center influenced the advancement of amphibious landing doctrine and training in the Army. By utilizing existing doctrine and experienced personnel, and despite chronic shortages of equipment, the Center was able to advance the application of amphibious landing operations. However, observers could not assess the effectiveness of the training since only one of the divisions saw combat in 1943. Although the soldiers and officers that received training would remember individual tasks, the collective application of these tasks required units to train regularly and maintain cohesion to remain effective. The brief separation from the Navy allowed the Army to develop amphibious landing doctrine appropriate for its assigned missions. The separation also influenced the Army's procurement of shore-to-shore landing craft that it would later use extensively in the Mediterranean and European Theaters of Operation.

⁴⁵ Becker, 31.

⁴⁶ Ibid., 17.

Part 2

Amphibious Landings and Lucian K. Truscott, Jr.

The personal and professional experiences of Lucian K. Truscott, Jr. provide a useful example of the challenges amphibious operations posed for Army officers. Truscott had limited exposure to amphibious landing operations prior to World War II. During the war, he was one of many American commanders that developed a closer acquaintance with such operations. Truscott began his education in amphibious landing operations three days after arriving in Washington, DC. At that time, Truscott visited recently promoted Major General Eisenhower, the head of the Operations Division of the War Department and learned his primary duties would involve serving on the staff of Vice Admiral Louis Mountbatten, the head of the Combined Operations Headquarters (COHQ) in London, England.⁴⁷ In June 1940, the British War Office formed the COHQ to plan and direct large-scale raiding operations along the German-occupied European coast. It included representatives from the three primary services, something that was not yet common in the US military.⁴⁸ In addition, the command was responsible for the development of amphibious landing craft and the training of raiding troops.

General Marshall arranged the assignment to allow American military staff officers the opportunity to gain experience in joint planning and to get American servicemen into the fight as soon as possible. The formation of all-American units of similar design as the British Commandos would accomplish the latter task. Truscott was to head this effort.⁴⁹ During the meeting, Truscott explained to Eisenhower that he had nothing more than a theoretical knowledge of amphibious operations gained while an instructor at the Command and General Staff School, had little practical experience with the Navy, and had only been in a small boat in salt water

⁴⁷ Heffner, 19.

⁴⁸ Bernard Fergusson, *The Watery Maze: The Story of Combined Operations* (New York: Holt, Rinehart and Winston, 1961), 47.

⁴⁹ Heffner, 39.

twice. To this Eisenhower stated, “I consider your background as a cavalry officer, your experience with the Armored Force, your experience as an instructor at Leavenworth, your experience on corps staff, and even your experience as a polo player especially fit you for this assignment. You know that Lord Louis wrote a book on polo. You can learn, can’t you?”⁵⁰

With this endorsement, Eisenhower stated that Truscott would meet with General Marshall in a few days. Until then, Truscott attended meetings with Eisenhower, discussed previously agreed upon plans between the British and Americans, and became acquainted with the officers that were joining him on the COHQ staff. Truscott’s meeting with the Chief of Staff of the Army, General Marshall, covered many of the topics discussed with Eisenhower. General Marshall stated that Truscott’s task was to “arrange for the participation and for the dissemination of this battle experience among assault units.” Furthermore, they “would be working members of Admiral Mountbatten’s staff and would assist in every way possible in the training of American troops and the preparations for the invasion.”⁵¹ With this guidance, Truscott and his group flew to London and assumed their assigned duties.

After arriving in London, Truscott found COHQ was involved in the planning and execution of numerous operations. Within two weeks of his arrival, and after gaining an appreciation of the British staff structure and the requirements of on-going operations, Truscott sent his recommendation to Marshall. Truscott believed that instead of using American soldiers from line units as augmentees in British raids, they should form a purely American unit modeled after the British Commandos. Two days later, General Marshall approved his proposition. After settling on the name “Rangers” for the unit, Truscott went about with its formation.⁵² The best available American soldiers stationed in the United Kingdom were the foundation of the unit and

⁵⁰ Truscott, 20.

⁵¹ Ibid., 23.

⁵² Bryant Russ, *75th Rangers* (St. Paul: MBI Publications, 2005), 9.

it trained alongside British Commandos in Scotland. Eventually, the unit conducted amphibious landing training with the support of the Royal Navy on objectives of increasing specificity, mirroring those of future operations.⁵³

Meanwhile, at the Arcadia Conference held in Washington, DC, in January 1942, the Allied leaders first discussed an invasion of North Africa in what would eventually become Operation Torch.⁵⁴ Despite the lack of specific guidance, the COHQ staff submitted a draft plan in late July and heavily refined it the following month.⁵⁵ Issues regarding the availability of naval and air support were at the forefront of the planning process. Concurrently, the process of establishing an Allied Force Headquarters was undertaken, resulting in one of a more American structure, but staffed with members of many nations.⁵⁶ Eisenhower assumed the position of Supreme Allied Commander in June 1942, which soon included the transition of Operation Torch planning.

Admiral Mountbatten viewed the formation of this new staff as unnecessary. He felt that the staff of the COHQ was more than capable of accomplishing what was required.⁵⁷ In his memoirs, Truscott reflected on this proposition, understood that the size and duration of raids

⁵³ Jeffers, 72.

⁵⁴ George F. Howe, *United States Army in World War II, The Mediterranean Theater of Operations, Northwest Africa: Seizing the Initiative in the West* (Washington, DC: Office of the Chief of Military History, 1957), 10.

⁵⁵ This was approved in concept by the United States and the United Kingdom during the Arcadia Conference on December 31, 1941, as part of the American-British Strategy. As part of “Closing and Tightening the Ring Around Germany,” it stated “the main object will be to strengthen this ring, and close the gaps in it, by sustaining the Russian front, by arming and supporting Turkey, by increasing our strength in the Middle East, and *by gaining possession of the whole North African coast* [emphasis added].” Combined Chiefs of Staff, *Proceedings of the American-British Joint Chiefs of Staff conferences held in Washington, D.C. on twelve occasions between December 24, 1941 and January 14, 1942 in two parts, part I – minutes of the conference, part II – approved documents* (Washington, DC: Joint History Office, 1942), Annex 1 to ABC-4, 4.

⁵⁶ Howe, 33.

⁵⁷ Truscott, 44.

differed entirely from those of an invasion, and disagreed with this assessment. He wrote,

It was of my own view, subsequently confirmed by experience, that the assault phase of major landing operations cannot be divorced from the land operations that follow. Troops that make the assault must continue in subsequent land phases, and the whole operation must be controlled and organized in depth. A single headquarters would have difficulty in controlling an assault on a wide front in numerous places. A separate command for the assault phase would not only be confusing, it would be unsound, for decisions made during the assault phase might jeopardize the subsequent course of land operations for which the assault was being made. For these reasons, I felt the detailed planning for the assault and all preparations for it should be the responsibility of the commander responsible for the land operations that would follow.⁵⁸

This statement encapsulates the dialogue between the Army and Navy regarding the conduct of amphibious landing operations during the period. The first change to FM 31-5 was published by the War Department on January 23, 1942. The War Department did not adequately settle the command structure during amphibious landing operations in this version of the manual. Instead, the manual referred to *Joint Action of the Army and Navy*, last published in 1935.⁵⁹ Given the joint nature of Operation Torch, the Combined Chiefs decided to make a central command and control structure under Allied Forces Headquarters, a structure allowed for in *Joint Actions of the Army and Navy* using the principle of unity of command.⁶⁰ During World War II, this was an early instance of command transferring from the naval to the army commander during the establishment of a beachhead in an amphibious landing operation.⁶¹

Operation Torch became a larger version of pre-existing plans.⁶² During the planning process, Admiral Mountbatten provided Truscott and a small team to assist the newly formed staff in its amphibious landing planning. Truscott directed several sections in support of the

⁵⁸ Truscott, 44-45.

⁵⁹ Field Manual (FM) 31-5, *Landing Operations on Hostile Shores* (Washington, DC: United States Government Printing Office, 1942), 2.

⁶⁰ Joint Action (1936), 6.

⁶¹ Howe, 39.

⁶² Truscott, 57.

operation's continual modifications.⁶³ It was during this period Truscott met Major General George S. Patton, Jr., the commander designated responsible for organizing and planning the operations of the Western Task Force. Mountbatten soon released Truscott from his duties with the COHQ, allowing Eisenhower to assign him to Patton to command a sub-task force during the operation.⁶⁴ During the month before his departure from England, Truscott continued to gain familiarity with the plan and develop an outline for the Western Task Force that nested with the overall concept. Since the Western Task Force embarked from the United States, the remainder of the detailed planning would occur there once Allied Force Headquarters approved the basic concept. Eisenhower approved the final objectives of the Western Task Force in early September, allowing continued planning to occur in the United States and the coordination with the Western Naval Task Force to begin in earnest.

Throughout this process, as part of his duties on the COHQ staff and as an advocate for the inclusion of American troops to gain combat experience, Truscott continually sought opportunities for their employment. Such an operation emerged in Operation Rutter, later renamed Operation Jubilee, planned as an amphibious raid against the French port of Dieppe. For Admiral Mountbatten and many in the COHQ staff, Jubilee was an opportunity to use formations that were active in Great Britain for nearly three years but not employed in combat.⁶⁵ This raid, however, was to be different than any other previously attempted in both scale, employing several thousand troops with armor support, and scope, a fortified stronghold instead of an open beach. During this operation, Mountbatten permitted Truscott to observe from the HMS *Fernie*, the alternate headquarters vessel, while forty US Army Rangers participated in the raid.⁶⁶

⁶³ Truscott, 58.

⁶⁴ Ibid., 59.

⁶⁵ Vagts, 700.

⁶⁶ Truscott, 63.

In the end, multiple observers labeled Operation Jubilee a failure due to the large number of casualties and soldiers captured by the Germans.⁶⁷ Following the event, Prime Minister Churchill described the operation as a reconnaissance in force intended to show the coordination between the three services (air, land, and sea) and as a necessary experiment that tested the requirements of similar operations in the future.⁶⁸ The raid on Dieppe did provide several important lessons for future, large-scale amphibious landings. These included the necessity of breaching tank and underwater obstacles, improving landing craft piloting, improving organization and control on the beaches, and the necessity of a dedicated command and control vessel.⁶⁹ Commanders and staffs integrated many of the lessons learned at Dieppe while planning the invasions of North Africa and Italy.

Aboard the HMS *Fernie*, Truscott observed the operation from the deck and frequently visited the operations room to receive updates. These updates from shore varied greatly from objective to objective, but as the operation continued, became increasingly negative. The main landing force had encountered stiff resistance and had not accomplished all its objectives. Furthermore, German defenders were destroying or disabling the armor accompanying the force at a rapid pace. After nearly two hours of continuous attempts to extract forces from the beach, radio communication was lost with the commander on shore.

Truscott recalled that, upon returning to Portsmouth and debarking for London, he “was a sadder and wiser man.”⁷⁰ He stated, however, that he did not consider Dieppe a failure, but a costly lesson with the Allies gaining experience in the necessary conditions for conducting an

⁶⁷ Of the nearly 5,000 Canadian troops participating in the operation, records listed 3,372 as killed, wounded, or missing. Vagts, 710.

⁶⁸ Ibid., 711-712.

⁶⁹ Fergusson, 183.

⁷⁰ Truscott, 71.

assault on a port, as well as experience in planning such a large-scale operation.⁷¹ His narrative of events, however, also indicated he was unimpressed by the use of naval artillery in support of landing troops and realized the necessity of operational security to maintain surprise. Upon returning to London, Patton permitted Truscott to stay longer to continue planning for Operation Torch. During this period, the planning group chose the final objectives, allocated the initial forces, and acquired the final intelligence requirements. Truscott began his return to the United States on September 19, 1942, prepared to assume his role as the commander of Sub-Task Force Goalpost⁷²

⁷¹ Truscott, 72.

⁷² Ibid., 78.

Part 3

Operation Torch

While assigned to the COHQ staff, Truscott gained experience in the planning and execution of amphibious landings. However, these activities were limited to short-duration raids primarily focused on disrupting German positions at key locations, not the large-scale invasion envisaged for North Africa. Additionally, the Army had not yet exercised its amphibious doctrine in a combat environment. Lastly, despite the execution of Operation Watchtower in the southern Pacific, there is no indication of lessons learned shared between the theaters of operation or between services in the three months prior to the Torch forces setting sail.⁷³ It is in this atmosphere that Truscott arrived at the War Department on September 26, 1942, assuming his role as the commander of Sub-Task Force Goalpost prior to moving to Fort Bragg, North Carolina, the location of its core unit. His objective was to capture the airfields adjacent to the city of Port Lyautey in French Morocco and secure the northern flank of the Western Task Force.⁷⁴

Unlike the Central and Eastern Task Forces, the Western Task Force of Operation Torch was comprised of solely US military personnel. The Army component, under the command of then-Major General George S. Patton, Jr., and Navy component, under the command of then-Rear Admiral H. Kent Hewitt, were still assembling at different locations along the east coast.⁷⁵ The units that comprised Truscott's sub-task force had not yet assembled, but eventually would do so at Fort Bragg, North Carolina. Following a conference between commanders at the War Department earlier in the day, Truscott arrived late on September 26, 1942, with no staff allocated and a requirement to be loaded on transports no later than October 16, 1942, for additional

⁷³ Operation Watchtower was the invasion of the islands near Guadalcanal on August 7, 1942.

⁷⁴ Heffner, 59.

⁷⁵ Morison (1947), 17.

training and subsequent movement to North Africa.⁷⁶ The first priority was to assemble a staff that could accomplish the planning required to conduct initial integration and training, movement to and loading of transport vessels, amphibious landing training exercises, and the assault of Port Lyautey. Truscott used personal connections and previous relationships to gather a small staff, but they had minimal experience in planning or executing amphibious landing operations. Many of these were junior officers with little familiarity with ships or military equipment in general. His Executive Officer did not arrive until October 5, 1942, but by October 10, 1942, this small staff had prepared the operations order for distribution on board and enroute to North Africa.⁷⁷

Truscott's experience on the COHQ staff was crucial during the planning period, especially when considering the possible options, particular since there was not an accurate assessment of the Vichy French resistance in North Africa. The first option was to concentrate his forces for a direct attack of the city of Mehdia Plage along the coast, then proceed along a single axis of advance to achieve the required objectives. This course of action would have been the least favorable, due to both the uncertainty of enemy opposition and the inability to mass forces quickly enough with the designated transports. Truscott and his staff did not pursue this option due to the high number of casualties that might result. The second option involved landing further to the south, away from enemy opposition, and then advancing north once adequate forces to achieve the required objectives. The risks identified with this course of action included the extended period of time it would take to transport forces to shore and the possible influences of weather. The last course of action considered was to attack across a broad front at several locations as close as possible to the objective areas, with the risk of losing control during the initial phases due to an inability to communicate with the dispersed units.⁷⁸

⁷⁶ Truscott, 80.

⁷⁷ Ibid., 83.

⁷⁸ Howe, 149.

Through the planning process, Truscott decided the last option was the most acceptable, allowing the sub-task force to accomplish its objectives of seizing the airport at Port Lyautey, seizing the airport at Salé, and protecting the northern flank of the larger operation.⁷⁹ This approach closely resembled that used at Dieppe, with the exception of not attacking directly into a built-up area. The city of Mehdia Plage was a beachside resort that the Army had presumed abandoned through intelligence estimates. This plan also allowed for the integration of pre-planned naval gunfire and the landing of armored vehicles away from areas where his staff expected high levels of resistance. Using timelines and ship-to-shore radios to maintain contact with the main command post during the landings would mitigate the risk of losing command and control of the operation.

Among the issues that challenged Truscott's staff during the planning process were the extended distance between the Navy and Army headquarters and the failure of the Navy to designate a commander for the Port Lyautey operation until October 5, 1942.⁸⁰ Throughout the planning process, repeated trips to Norfolk, Virginia, the home of Headquarters, Amphibious Force Atlantic Fleet, were required to coordinate with Rear Admiral Hewitt's staff, then with the staff of Rear Admiral Monroe Kelly, who commanded the Northern Attack Group.⁸¹ Additionally, of the naval forces allocated for the operation, the training level of transport personnel was inadequate and of the vessels in use, less than half were commissioned for more than a year. Additionally, there was a shortage of personnel with adequate amphibious landing

⁷⁹ Howe, 46.

⁸⁰ In his memoirs, Hewitt writes of his first meeting with Patton in August 1942. Despite the high regard he held for the quality of soldier in his staff, Hewitt believes that a major issue was that they were "ignorant of the techniques and requirements of amphibious operations." Furthermore, Hewitt writes he "begged" Patton to relocate his headquarters near Norfolk to facilitate joint planning, but that Patton felt it was necessary to remain at the War Department. H. Kent Hewitt, *The Memoirs of Admiral H. Kent Hewitt*, ed. Evelyn M. Cherpak (Newport: Naval War College Press, 2004), 139.

⁸¹ Truscott, 82.

training, amplified by frequent personnel transfers throughout this period due to the expansion of the Army.⁸²

Following the completion of the operations order, Truscott and his staff moved from Fort Bragg to Norfolk to oversee the loading of transport vessels. The loading had to be complete by October 15, 1942, because of a lack of space in port and the requirement to conduct joint landing training before departure. Sub-Task Force Goalpost was made of 1st Battalion, 66th Armor Regiment of the 2nd Armored Division, and the 60th Infantry Regiment (designated a Regimental Combat Team or RCT), both of which had received some amphibious landing training.⁸³ Once the sub-task force embarked from Norfolk, the transports moved to the Solomons Island training area in Chesapeake Bay. There, the transport crews and landing forces conducted their only training exercises.

The training focused on both individual and collective skills. First, Truscott insisted on starting with the basics, with transport crews practicing the lowering landing crafts and soldiers debarking transports on nets as an example. The second focus was on collective training, with each battalion conducting both a day and night landing from the transports and with the landing craft crews they would use during the actual assault. Each battalion was to assault different beaches simultaneously. This allowed the sub-task force to exercise multiple systems at different echelons. On two occasions, administrative issues within the Navy chain-of command interrupted the training. The unwillingness of landing craft crews to land on some of the designated beaches for fear of damaging hard to get landing craft propellers caused the first interruption. The second interruption was the requirement of the transport vessels to return to Norfolk for refueling before the voyage across the Atlantic. Truscott called Rear Admiral Hewitt directly on each occasion to

⁸² Morison (1947), 26.

⁸³ Howe, 61.

resolve the issues and training continued as planned.⁸⁴ After three days and nights of training, the sub-task force conducted its final exercises on the night of October 19, 1943, focusing on naval gunfire and air support. All transports returned to Norfolk by noon the following day.⁸⁵

Truscott's accounts of the training exercises were negative, with improvement needed in specific areas. The first area was the proficiency of landing craft crews, many whom were controlling landing craft for the first time. The second was the conditions of training exercises, deemed unrealistic because they occurred within Chesapeake Bay.⁸⁶ The third area was the difference between Army and Navy communications systems. Each operated independently of each other. During training, naval shore parties put ashore to control naval gunfire mitigated associated risks, but the lack of time prevented adequate refinement of these procedures. The last area was the lack of a designated command and control ship for the operation. Both the Navy and Army had recognized the need, but there was a lack of vessels to fill the requirement.⁸⁷ The joint Army-Navy task force "resembled a football team forced to play a major game very early in the season, before holding an adequate practice or obtaining proper equipment."⁸⁸ This force set sail for western North Africa on October 23, 1942.

At the final shore conference led by Rear Admiral Hewitt, the Commander of Transports, Captain Emmet, stated, the "Navy's mission in this operation is to serve the troops, to die for

⁸⁴ Hewitt and Truscott met in June 1942 while the latter was serving on the COHQ staff. The relationship was strong enough between the two that Hewitt described Truscott as a friend and Truscott felt certain he could leverage their relationship to solve problems like these directly. Hewitt, 141.

⁸⁵ Truscott, 86-88.

⁸⁶ The Navy abandoned locations along the Atlantic coast because of the fear of German U-boat intervention. Morison (1947), 28.

⁸⁷ Ibid., 30.

⁸⁸ Ibid., 33.

them if necessary.”⁸⁹ The Navy was prepared to conduct the operation despite the deficiencies.

Major General Patton, however, had a different opinion of the Navy’s ability to achieve its tasks in support of the amphibious landings and subsequent operations. At the same conference Patton commented, “never in history has the navy landed an army at the planned time and place.”⁹⁰

Whether or not Truscott shared a similar opinion at the time is unknown, but it is clear he lacked the confidence in the capabilities of Sub-Task Force Goalpost’ naval support. In particular, he showed concern over their inability to move his troops rapidly to the correct beach, allowing for the build-up of sufficient combat power. Following his last meeting with subordinate commanders, Truscott described his thoughts and feelings in his memoirs:

When I stood at the ship’s rail and watched the last of the boats carrying my subordinate commanders disappear into the gathering dusk, I experienced a solemn moment. It was borne upon me with an awesome finality that, for better or worse, the die was cast. As our plans were drawn up, so would we fight weeks later, two thousand miles away on the shores of Africa. My own mistakes and the mistakes of others in preparing this command for battle would be paid for in the lives of Americans for whom I was responsible. It was a sobering thought. I wished we were better prepared, but there was no use now thinking what might have been. Our problem was to make the plans succeed. I had learned that preparation is the first essential for success in war, and that the adequacy of preparation reflects the capacity of a commander and his staff.⁹¹

With that, after nearly thirty days in command of a sub-task composed of units possessing no previous experience together and supported by a Navy task force with similar issues, Truscott began the two-week voyage across the Atlantic Ocean for Port Lyautey.

Late on the evening of November 7, 1942, Truscott asked Commodore Gray, after observing lights on a distant shore, where they were. Without instilling confidence, Gray replied, “Well, General, to be perfectly honest, I am not right sure where we are.”⁹² The previous two weeks at sea had been uneventful and Truscott had instructed subordinate commanders to ensure

⁸⁹ Morison (1947), 41.

⁹⁰ Ibid., 41.

⁹¹ Truscott, 89.

⁹² Ibid., 93.

soldiers remained occupied through various training activities. However, it was now that any benefits of the training at Solomons Island would pay off. Truscott hoped that subordinate commanders corrected deficiencies during the voyage with available resources.

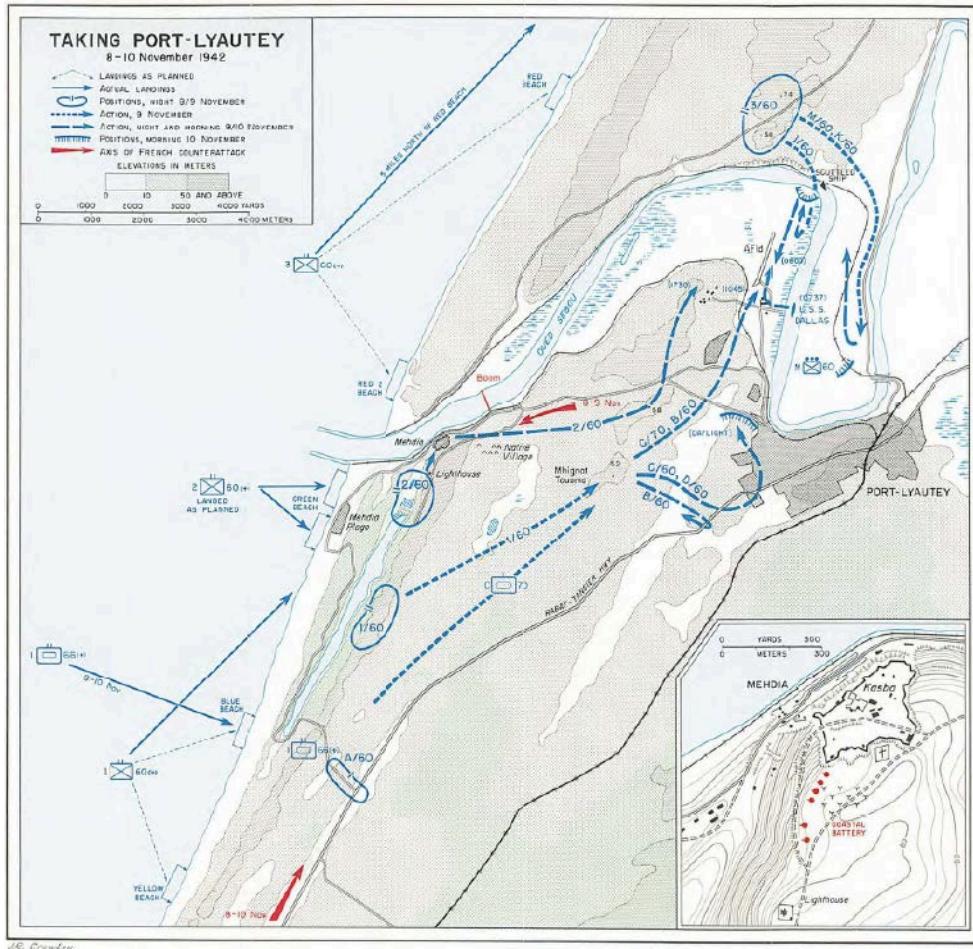


Figure 1: Taking Port Lyautey

Source: George F. Howe, *United States Army in World War II, The Mediterranean Theater of Operations, Northwest Africa: Seizing the Initiative in the West* (Washington, DC: Office of the Chief of Military History, 1957), Map III.

Already an hour late, the transports had difficulty locating each other and the area in which the transports were to lower and load landing craft for the assault. The debarkation process took much longer than anticipated, as well. From the beginning, Truscott was losing confidence in the Navy and in his ability to execute his mission successfully. Additionally, the Allied forces were broadcasting a recorded speech of President Roosevelt and Lieutenant General Eisenhower,

the Commander of the MTO, over the radio. Any surprise the Allies had gained by sailing across the Atlantic unobserved was lost at this point in the operation. During this time, Truscott boarded a scout boat and moved between transports to locate subordinate commanders, indicating to them that the plan would not change regardless of the delays and the radio message.⁹³ The second wave would not follow until three hours after the latter hit the beach, a much longer time than the plan anticipated.⁹⁴

During the amphibious landing, the initial wave landed on only three of the five designated beaches, with one landing nearly five miles north of its intended location. Additionally, the effect of weather was evident in the inability of some landing craft to free themselves from the beach or avoid foundering in the heavy surf. These factors, combined with the lack of integration between the ground maneuver plan and naval gunfire support, resulted in the failure to achieve initial objectives on the desired timeline. This is particularly true of the large caliber guns located in the Kasbah in Mehdia, which were a ground objective that forces did not achieve as planned. Truscott did not allow naval gunfire to suppress this target because of the initial uncertainty of the Vichy French resistance during the planning process and his belief that landing forces quickly would silence them. Truscott's lack of trust in the Navy's abilities required the Navy to move transports further out to sea, beyond the range of the active guns, and to continue loading landing craft of follow on waves.⁹⁵ All of these issues negatively affected the execution of the amphibious landing.

Truscott moved to shore with the second assault wave, having already lost situational awareness from the command vessel. He also wanted to get ashore before nightfall, when the

⁹³ Morison (1947), 121.

⁹⁴ Truscott, 108.

⁹⁵ Morison (1947), 124.

ability to conduct landings safely would decrease.⁹⁶ Once he arrived at the beach, the full weight of the problem became apparent. First, the crew of Truscott's command vehicle mired it in the soft sand of the beach almost immediately, forcing them to abandon it. The artificial paths troops laid on the beach to enable vehicle and foot movement over the sand, made of wire and burlap, were not available in large enough quantities to be effective.⁹⁷ On the beach, Truscott described the scene as "chaotic." Additionally, there was no communication between the beach masters and the transport vessels, which led to further confusion as ships continued to land on the wrong beaches.⁹⁸ Lastly, when Truscott arrived at the command post of the 1st Battalion, 60th Infantry Regiment, he was again unable to contact the transport vessels or gain an accurate assessment of the success or failure of the operation.⁹⁹ At nightfall on the first day of the landings, instead of achieving all the desired objectives, Sub-Task Force Goalpost made minimal progress. Due to the influence of weather and enemy actions, the Sub-Task Force had yet to land any heavy weapons or armored vehicles and build up the supplies required to continue executing the operation.¹⁰⁰

For the Allies, Operation Torch was successful, despite the delays and miscues that plagued the operation at many landing sites. This success, however, did not preclude the commanders involved to seek improvement. In the "Summary of Plan and Operations," Truscott wrote, "the combination of inexperienced landing craft crews, poor navigation, and desperate hurry resulting in lateness of hour, finally turned the debarkation into a hit-or-miss affair that would have spelled disaster against a well-armed enemy intent upon resistance."¹⁰¹ From his

⁹⁶ Barbara Brooks Tomblin, *With the Utmost Spirit: Allied Naval Operations in the Mediterranean 1942-1945* (Lexington: University Press of Kentucky, 2004), 28.

⁹⁷ Truscott, 109.

⁹⁸ Ibid., 110 and 113.

⁹⁹ Ibid., 109.

¹⁰⁰ Tomblin, 29.

¹⁰¹ Morison (1947), 123.

perspective, the failure on the initial day of amphibious landings was a result of the Navy's inadequacies, with the Army bearing no responsibility. This is not, however, an accurate assessment. There were decisions made during the planning process that contributed to many of these shortcomings.

The failure of Truscott to integrate naval gunfire was a result of personal preference, not a product of the existing doctrine. A chapter is dedicated to the subject in FM 31-5, Chapter 6, Naval Gunfire, explained, in detail, types of targets and fire missions, the characteristics of naval gunfire, the requirements in guns and ammunition, and methods for the coordination of fire.¹⁰² Two factors could have contributed to Truscott and his staff failing to integrate naval gunfire into the ground maneuver plan, especially during the initial amphibious landings. The first, described by the Navy's history of the operation, was Truscott's distrust of its gunnery skills.¹⁰³ A more plausible reason may have been the result of a compartmentalized and compressed planning process before the operation. During the planning period, which lasted only twenty days, Truscott seemed more concerned with the landing of units to accomplish his given objectives, not the integration of all available resources. Additionally, the distance between headquarters and the failure of the Navy to assign a commander to the Port Lyautey objective area until late in the planning precluded those planning efforts. Third, the training focus of Truscott was on landing craft loading and landing procedures, with only one evening dedicated to naval gunfire and air coordination. Lastly, despite the eventual request to use naval gunfire to suppress the guns of the Kasbah, the lack of communication between the command vessel and ground units prevented its use for fear of fratricide. Had the Navy targeted and silenced these guns before the landings, Truscott may have prevented many events that followed.

Whatever the reason, the failure to apply the existing Army doctrine resulted in delays in

¹⁰² Field Manual (FM) 31-5, *Landing Operations on Hostile Shores* (Washington, DC: Government Printing Office, 1941), 101.

¹⁰³ Morison (1947), 124.

the landing of follow-on waves and slowed the progress of the ground maneuver plan. The Navy's doctrine was specific on the different uses of naval gunfire in support of amphibious operations, as stated in FTP 167:

In amphibious operations, it is the mission of certain naval task groups to replace the landing force artillery in supporting the assaulting troops by fire on shore targets. That is, by delivering fire on enemy personnel, weapons, and other defensive installations, and on critical terrain features which may conceal undiscovered enemy positions, ship batteries enable the landing force first to land, then to advance, hold, or withdraw, with fewer casualties than would otherwise be possible. In some cases, effective naval gunfire may be the critical factor which determines success or failure.¹⁰⁴

The remainder of the chapter provided information more technical in nature, but also included information pertinent to the planning and control of naval gunfire.

Another failure attributable to a lack of adherence to available doctrine was the improper method used by Truscott and his staff to load transport vessels for debarkation. FM 31-5 and FTP 167 both provided guidance on the loading of transport vessels, though the Army's manual provides less guidance on the duties and responsibilities of the Transportation Quartermaster. The officer chosen for this position is the commander's representative charged with creating and implementing the loading plan for each vessel. Truscott assigned a junior officer to this position. Despite the lack of depth FM 31-5 provided, only five pages in comparison to the eleven with diagram examples in FTP 167, it is clear on the methods of loading and the purpose of each. Combat loading is a loading method "in which certain units selected because of their probable destination and employment in landing on hostile shores are completely loaded on one ship with at least their essential combat equipment and supplies immediately available for debarkation with the troops."¹⁰⁵ Truscott's admission that the initial wave lacked the necessary heavy weapons at the end of the first day is an indication this activity was improperly executed.¹⁰⁶

¹⁰⁴ FTP 167, 111.

¹⁰⁵ FM 31-5 (1941), 6.

¹⁰⁶ Tomblin, 29.

There is also a dichotomy between Army and Navy doctrine regarding the landing of tanks. FM 31-5 contains roughly one and a half pages on the subject, while FTP 167 dedicates three pages, covering the requirements more thoroughly. The ground maneuver plan of Sub-Task Force Goalpost required the rapid build-up of its attached armor battalion to advance against Port Lyautey from the south rapidly. At the end of the first day, after two waves, only seven of fifty-four tanks were ashore, rendering any assault on Port Lyautey with armored forces impossible until November 9, 1942.¹⁰⁷

The last failure in the use of doctrine by Truscott and his staff was the control of the landing beaches once the landings began. Both the Army and the Navy advocated the employment of Shore Parties. These units would have the responsibility of organizing and controlling the beach above the waterline. However, despite the identification of the position in FM 31-5, the responsibility and the number of tasks required overwhelmed the capabilities of the individuals chosen. Although Truscott does not specifically mention a Shore Party training while at Solomons Island, it seems that he would have tested this function during the exercises. Making this assumption, the reason attributed for this inadequacy was a lack of focused training, specifically training in combat-like conditions, which Solomons Island did not replicate. The importance of this position and the number of personnel required to execute the required tasks effectively would evolve in the doctrine of both the Army and Navy over time due to experiences such as this.

Even had the Army and Navy followed available doctrine, the problems they experienced would still likely have occurred. Commanders and staffs cannot anticipate some factors during the planning process, especially those involved in a voyage of nearly two thousand miles across an ocean. However, these landings offered a clear picture of the challenges facing the Army and Navy in subsequent operations, especially operations carried out against a determined opponent.

¹⁰⁷ Ryan Lubin, “Operation Torch: The Planning and Performance of Amphibious Operations in North Africa” (Sr. Thesis, Georgia College and State University, 2011), 24.

The compilation of comments collected by the Allied Force Headquarters echoed issues similar to those faced by Truscott and Sub-Task Force Goalpost. The Eastern Task Force noted, “our greatest weakness is the lack of adequate doctrine and technique for amphibious operations” and greater uniformity was required in loading and unloading equipment and personnel.¹⁰⁸ Deficiencies in the preparedness of shore parties are noted by various units as well, with the recommendation that, “the handling of the supplies on the beach must be carefully rehearsed just as the other parts of the operation are rehearsed.”¹⁰⁹ The combined nature of the Central Task Force influenced the loading of transport vessels, resulting in the movement of personnel and equipment to beaches in separate vessels, a method “not considered satisfactory.”¹¹⁰ These issues were similar to those faced by Truscott and the Western Task Force as a whole.

The comments provided by the Headquarters of the Western Task Force were, in many cases, much more direct in their assessment of the landing operations. Given the condensed nature of the planning conducted by the Western Task Force, it recommended that at least six months to conduct the necessary joint coordination for an amphibious landing operation.¹¹¹ A recommendation by the G-4 Section focused on the availability of transport vessels and the desire to have information about the assigned vessels at least six weeks prior to the sailing date, including accurate information regarding storage capacities.¹¹² Lastly, the G-3 Section made the following recommendation regarding training:

The need for much more amphibious troop training is apparent. Training in the actual handling supplies across beaches, training of shore parties and beach parties in conjunction with troops and their supplies, and training in the involved communications

¹⁰⁸ Allied Force Headquarters, *Lessons of Operations Torch* (Washington, DC: Department of the Army, 1943), 7.

¹⁰⁹ Ibid., 10.

¹¹⁰ Ibid., 15.

¹¹¹ Ibid., 41.

¹¹² Ibid., 43.

system on a landing on a hostile shore must be emphasized and carried out under as near as possible combat conditions, day and night, as possible.¹¹³

This comment indicated that events observed by Truscott on the beaches near Port Lyautey were not an anomaly, but common occurrences on most beaches. Furthermore, recognition by the Army and Navy that they must address changes in the near future was an operational necessity, especially since future amphibious landings were almost a certainty in the MTO. Fortunately for the Allied Forces, nearly nine months passed until they conducted another such operation. This allowed for a thorough review of tactics within and between services and coincided the arrival of new types of vessels and equipment specifically designed to increase the effectiveness of landing operations. Truscott would lead another amphibious landing force, but it was five and a half times larger and included shore-to-shore landing operations for the first time.

¹¹³ Allied Force Headquarters, 51.

Part 4

Operation Husky

Following the conclusion of ground operations with the Western Task Force, and without a permanent position after Patton consolidated his forces, Truscott went to Eisenhower in search of a new assignment in theater. On December 27, 1942, Eisenhower assigned Truscott to command his forward command post co-located with that of the First Army as a Deputy Chief of Staff.¹¹⁴ For the next three months, Truscott held this position and during this time learned of upcoming operations in the Mediterranean. Before taking command of the 3rd Infantry Division in March 1943, he knew the next major objective was Sicily. He did not know, however, where the 3rd Infantry Division would land or to which higher headquarters it would answer.

The Allies made the decision to invade Sicily at the Casablanca Conference in January 1943. The participants considered Sicily the best of several available options given the availability of troops and materiel. It also helped to show the resolve of the United States and Great Britain, with the Soviet Union continuing to bear the full weight of Germany's attention.¹¹⁵ On January 23, 1943, Eisenhower and his staff began planning for Sicily, though the continued operations in North Africa kept divided their attention. The overall purposes of the operation were to secure the Allied sea-lanes through the Mediterranean, to try to knock Italy out of the war, and to divert German strength from the Soviet front.¹¹⁶ Like most operational plans, Operation Husky undertook several forms until Eisenhower accepted the final concept on May 3, 1943. Subordinate commands received the order shortly thereafter.¹¹⁷

¹¹⁴ Truscott, 125.

¹¹⁵ Douglas Porch, *The Path to Victory* (New York: Farrar, Straus, and Giroux, 2004), 417.

¹¹⁶ Albert N. Garland and Howard McGraw Smith, *United States Army in World War II, The Mediterranean Theater of Operations: Sicily and the Surrender of Italy* (Washington, DC: Center of Military History, United States Army, 1986), 52.

¹¹⁷ Ibid., 62.

After assuming command of the 3rd Infantry Division, Truscott undertook a review of its training and readiness. In late February, the heavy losses inflicted by German defenders at Kasserine Pass required the division to transfer nearly 3,400 soldiers, all but 400 of whom were infantrymen, as replacements for the 1st and 34th Infantry Divisions.¹¹⁸ While in England, Truscott had developed an appreciation for the capabilities of the American soldier based on his experiences with the Rangers and Commandos. He felt that if leaders strictly upheld standards of performance and conducted tough and realistic training, the division would become a capable fighting force.¹¹⁹ With a division comprised of replacements, Truscott was able to test his theory. The primary focus of Truscott and the division over the next four months after transferring from Morocco east to Tunisia was training.

The Invasion Training Center established at Arzew, near Port aux Poules, Algeria, provided much of the training required for the upcoming invasion. Established by the Fifth Army in January, the purpose of the Center was “to develop doctrines, technique, and instruction for invasion and to build up a reserve of trained troops for invasion operations.”¹²⁰ Here, units were able to train with the Navy in all available types of landing craft, practice the coordination of naval gunfire, train in a near-urban environment, and, for many, experience the sights and sounds of the battlefield for the first time in intense, near-realistic training exercises. Brigadier General John W. “Mike” O’Daniel, an Army officer, commanded the center with amphibious training headed by Rear Admiral Andrew C. Bennett of the US Navy.¹²¹ Truscott appreciated the utility of the Center and maximized the resources available. Battalions and companies executed both day

¹¹⁸ Donald G. Taggart, *History of the Third Infantry Division in World War II* (Nashville: Battery Press, 1987), 41.

¹¹⁹ Truscott, 176.

¹²⁰ *Fifth Army History, Part I: From Activation to the Fall of Naples* (Italy: Headquarters Fifth Army, 1944), 6.

¹²¹ Ibid., 6.

and night landings and it was expected soldiers would become familiar with the types of landing craft available. Additional schools were available to train transportation quartermasters and communications personnel. The Center also developed and taught the best methods for vehicle and equipment waterproofing and beach organization, maintenance, and supply.¹²² In regards to the Navy being responsible for this training, Truscott wrote,

I believed strongly that the Navy should be responsible for providing, maintaining, and operating all landing craft and giving Naval support of such operations, but my experience with the Navy in training for Goalpost was too fresh in my mind for me to believe that the primary responsibility for control of training should be vested elsewhere than in the command of the troops that would fight on shore.¹²³

Despite his early misgivings, Truscott and the 3rd Infantry Division benefited from the training at Arzew. In addition to familiarizing troops with many new types of landing craft, it strengthened the trust between the two components.

Leading the planning for Husky, Truscott again leaned heavily on his experiences at COHQ. He established the JOSS Force Planning Board to study and plan the operation in an isolated environment.¹²⁴ The board included principal assistants from each staff section, as well as representatives from attached units and the Navy. The reason for establishing the board was three-fold. First, it enabled the remainder of the staff and, and those of subordinate units, to focus on training. Second, it maintained operational security by protecting the planning effort. Finally, it created a collaborative environment to plan a complicated problem. This was especially important because JOSS Force, unlike the other landing forces for Operation Husky, would be conducting the first, large-scale shore-to-shore amphibious landing in the MTO.¹²⁵ The tactics,

¹²² Truscott, 186.

¹²³ Ibid., 180.

¹²⁴ Ibid., 183.

¹²⁵ Samuel Eliot Morison, *History of United States Naval Operations in World War II, vol. IX: Sicily-Salerno-Anzio, January 1943 – June 1944* (Boston: Little, Brown and Company, 1957), 29.

techniques, and procedures for such an operation were not yet available in the doctrine of either service, leading to much experimentation in the months before the landing. Naval Task Force 86, commanded by Rear Admiral Richard L. Conolly, provided the naval transportation, escort, and support for JOSS Force. He believed that such a landing operation was possible and that Truscott was the right choice to lead JOSS Force because of his experiences with British shore-to-shore operations, the only military yet to attempt landing of this type during World War II.¹²⁶ The relationship developed between Truscott and Conolly benefited both commands.

The final version of the Operation Husky plan gave JOSS Force three principle missions during the amphibious landing phase of the operation. First, it was to land in the Licata area and seize the adjacent airfield and port by nightfall of the first day. Second, it was to extend the beachhead to the Yellow Line and protect the invasion forces from any enemy interference from the west and northwest. Third, it was to gain and maintain contact with II Corps on its right.¹²⁷ The strength of JOSS Force reached nearly 45,000 soldiers, half of them scheduled to land on the first day of the operation.¹²⁸ Due to changes in the initial plan, however, there was no suitable intelligence, including photographs, regarding the area around Licata beyond basic maps of the four suitable beaches. To remedy this, Truscott made a personal visit to Major General James Doolittle, the Commander of the North Africa Strategic Air Force, to request photographs of the landing sites. The Army Air Corps delivered these, representing the peak of its involvement in the planning process.¹²⁹ The photographs showed that of the four available, the beaches west of Licata were poor, while those to the east were suitable for landing operations. Ultimately, the staff selected all four for use during the initial phases of the invasion. The beaches in the east

¹²⁶ Morison (1957), 30.

¹²⁷ Garland and Smith, 98.

¹²⁸ Ibid., 99.

¹²⁹ Truscott, 200.

would remain active after units seized the initial objectives, allowing supplies to be built-up for the remainder of operations on Sicily.¹³⁰ From west to east, the staff named the beaches Red, Green, Yellow, and Blue.

The JOSS Force Planning Board identified several issues that required further study to plan the operation fully. The first was the introduction of new landing craft, most notably the Landing Ship – Tank (LST) and the Landing Craft – Tank (LCT).¹³¹ New loading procedures were required, including testing the maximum allowable number of personnel and amount of equipment each could load and transport safely. Since this was a shore-to-shore operation, ships loaded in North Africa were to unload directly on to the beaches of Sicily with combat formations intact. This forced Truscott and his staff to develop new tables of personnel and equipment for the assault battalions to meet initial tactical requirements. To do this, Truscott directed the formation of special assault battalions in each RCT, which included small detachments of infantry and engineer demolition experts. This purpose of this initial wave was to reduce the beach positions while subsequent waves moved through to beachhead objectives.¹³² It allowed the following waves to maintain speed and momentum during the most vulnerable period of the landing.

Truscott valued the JOSS Force Planning Board concept and saw it as necessary to maintain synchronization of such a complicated operation. As the plan developed, RCT staff members were included in the process to maintain situational awareness for their commanders and to allow their commanders to continue focusing on training.¹³³ After the brief deployment of the division to assist in the reduction of the Axis position around Tunis, it eventually moved to Bizerte. While there, along the northern coast of Tunisia, JOSS Force would conduct its final

¹³⁰ Garland and Smith, 99.

¹³¹ Morison (1957), 29.

¹³² Truscott, 198.

¹³³ Ibid., 201.

training and preparation, and before embarking for the invasion. Final preparations included the construction of long causeways used for debarking LSTs in case they were unable to approach the shore to unload vehicles, experimenting with the use of mortar-fired grappling hooks to remove beach obstacles, firing of tanks from LSTs, and constructing a runway on a LST for the use of two reconnaissance aircraft.¹³⁴ Operation Copybook was the last training event conducted by JOSS Force before the invasion. The realism of the exercise made participants believe they were landing on Sicily. The result was increased confidence between the landing forces and the naval component.¹³⁵

Truscott was able to train his forces for much longer, he developed a sound tactical plan that included elements of all units involved, and he maintained a positive relationship with the supporting US Navy component. He and Rear Admiral Conolly developed a strong bond that reverberated through each command.¹³⁶ In regards to command of the operation, Truscott stated that he and Conolly discussed the subject once and only after setting sail.¹³⁷ They decided that Conolly would be in command at sea and Truscott would command the landing forces, with Conolly's forces supporting as long as required. With that, Naval Task Force 86, with the assault elements of JOSS Force, departed Bizerte on the afternoon of July 8, 1943 and headed for the southwestern coast of Sicily.

Like much of the Mediterranean, Sicily was no stranger to war and the beaches chosen for JOSS Force to land were no different. In 211 BC, the Carthaginians, sailing a similar route, had met their defeat near Licata.¹³⁸ The forces prepared to land in July 1943 did not resemble

¹³⁴ Morison (1957), 31, and Truscott, 202.

¹³⁵ Taggart, 43, and Truscott, 207.

¹³⁶ A Military Observer, *COHQ Bulletin Y/1: Notes on the Planning and Assault Phase of the Sicilian Operation* (Washington, DC: Department of the Army, 1943), 8.

¹³⁷ Truscott, 208.

¹³⁸ Morison (1957), 72.

those of earlier ages, despite the similarities in purpose. The Allies expected the Italians to defend at the water's edge, preventing any assault forces from establishing a beachhead. The Allies expected the Germans to conduct a counter-attack once it identified the main landing force.¹³⁹ Allied actions within the Mediterranean after the fall of Tunis had provided the Axis with ample evidence that Sicily was the next target. Despite this, the defenses were ill prepared for an amphibious invasion, arraying forces in such a manner that prevented a decisive reaction.¹⁴⁰

The voyage between Bizerte and Sicily, though much shorter than that between Norfolk and Port Lyautey, still provided opportunity for failure. After departing Bizerte, unexpected storms slowed the formation, but there was no resistance from the enemy. The landing forces lost the element of surprise, however, when Italian coastal defenses observed the Naval Task Force 86 command ship, the USS *Biscayne*.¹⁴¹ Separated into four attack groups, one for each designated beach, the assault proceeded with a maximum delay of ninety minutes from the execution timeline.¹⁴² The initial assault waves were primarily composed of infantry formations with assaulting soldiers carrying only specified equipment. The assault landings were successful, but the level of success varied from beach to beach.

¹³⁹ Garland and Smith, 83.

¹⁴⁰ Porch, 425.

¹⁴¹ Morison (1957), 74.

¹⁴² A Military Observer, 23-24.

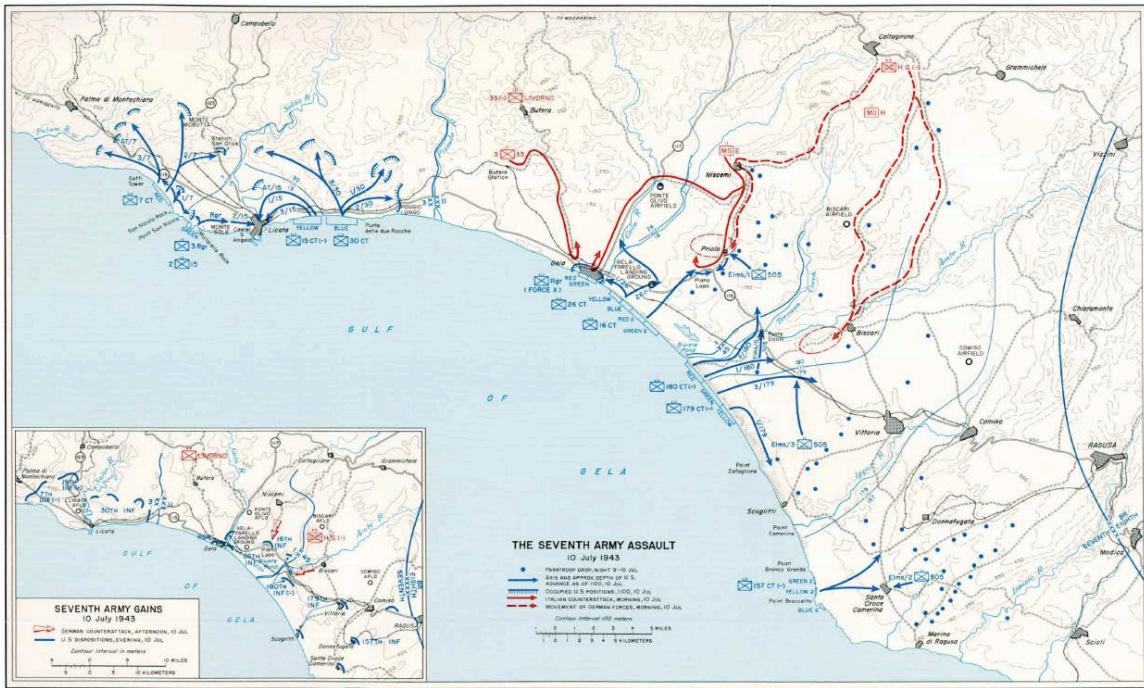


Figure 2. The Seventh Army Assault

Source: Albert N. Garland and Howard McGraw Smith, *United States Army in World War II, The Mediterranean Theater of Operations: Sicily and the Surrender of Italy* (Washington, DC: Center of Military History, United States Army, 1986), Map III.

On JOSS Force's left, about five miles west of Licata, the 7th RCT made its landing near the town of Gaffi on Red Beach. From the outset, this assault landing was troubled. First, due to its extreme location on the flank, the landing vessels were late getting into place and marking scouts were not there on time to direct forces to the correct areas.¹⁴³ Second, intelligence efforts had failed to identify a sandbar that stretched parallel to the beach at distances varying between 100 and 300 feet. This sandbar created a runnel, or narrow channel, up to six feet in depth between it and the shoreline.¹⁴⁴ Third, the beach lacked the necessary exits to relieve congestion in the landing area, especially of wheeled vehicles. Lastly, of all the landing beaches, Red Beach received almost continual indirect fire from opposing Italian forces and despite the creation of a

¹⁴³ Morison (1957), 81.

¹⁴⁴ Beck, et al, 127.

grid system to coordinate fires between the supporting naval vessels and the units ashore, a collision between two of those vessels while getting into position caused a delay in its employment.¹⁴⁵

The failure to identify the sandbar caused the foundering of thirty-two of the sixty-five trucks that attempted to cross the runnel. Not only were these vehicles unavailable for mobility purposes on shore, they also caused additional work for supporting engineer units as they had to be recovered to remove hazardous debris for incoming landing vessels. The residual effects from the previous day's storms also wreaked havoc for the smaller landing craft attempting to land. Many landing craft beached themselves sideways to allow troops to exit safely. This also caused exhaustion amongst the landing craft crews at a higher than expected rate. The inability of the larger landing ships to approach the beach to offload heavy equipment, such as supporting tanks and self-propelled field artillery pieces, also intensified the exhaustion of the crews. Landing crews devised a system to transfer these vehicles from a landing ship, across a landing craft into another, and then bring it to shore. Again, this slowed the process of building combat power ashore and exhausted landing craft crews.

The landing forces overcame the lack of continuous and responsive naval gun support in two ways. First, Conolly reallocated vessels to support the units ashore. Secondly, after the beachmaster on Red Beach refused to allow vessels to approach because of continual indirect fire, Conolly ordered his vessels to make the landings, which they did with no damage.¹⁴⁶ In the history of the 3rd Infantry Division during World War II, Conolly apparently earned the moniker “Push-‘em-in-closer” from this incident.¹⁴⁷ Red Beach would remain the most troublesome beach through the operation, closing, as intended, after three days of moving personnel and equipment

¹⁴⁵ Morison (1957), 81-83.

¹⁴⁶ Morison (1957), 83, and Beck, et al, 128.

¹⁴⁷ Taggart, 53.

ashore over it.

Moving east across the landing zone, the landings at Green Beach went exceptionally well. Only intended for use during the initial assault, like Red Beach, the assaulting forces of the 3rd Ranger Battalion and a battalion from the 15th RCT made the landings as planned and on schedule. At this beach, the marking scouts were in place and able to direct landing craft to the designated locations. The first waves, consisting primarily of Rangers and elements of the supporting infantry battalion moved ashore to their objectives at such a pace that by the time their vehicles arrived, no one was there to receive them. Within four and a half hours of the initial landing, the Castel Sant' Angelo and its coastal artillery battery was seized and American troops raised an American flag over its walls to signal success.¹⁴⁸ Troops landing on Green Beach attributed their success to the realism of training, since they had trained on terrain that bore semblance to that encountered.¹⁴⁹ As planned, Green Beach closed after twelve hours.¹⁵⁰

The most successful landing occurred east of Licata, at the long sandy beaches near Salso and Falconara, designated Yellow and Blue respectively. At Yellow Beach, scouts adequately marked the landing areas and the remainder of the 15th RCT landed in the correct areas. Many of the landing craft were unable to retract themselves from the beaches due to the surf, causing slight delays that had little effect on the course of the landings and subsequent actions. At Yellow Beach, surprise of the defending forces was complete.¹⁵¹

¹⁴⁸ Taggart, 55.

¹⁴⁹ Morison (1957), 85.

¹⁵⁰ Beck, et al, 128.

¹⁵¹ Taggart, in the *History of the Third Infantry Division in World War II*, offers an anecdotal story of the surprise achieved on Yellow Beach. In a captured enemy emplacement, and war correspondent embedded with the first wave answered an Italian field telephone. In Italian, the reporter assured the caller that reports of United States' troops landing on the southern coast of Sicily were false and there was no action. Having received thanks from the caller, who apparently was a general, the reporter then hung up the phone and continued to observe LSTs unloading troops just east of Licata. Taggart, 51.

At Blue Beach, the scouting parties failed to arrive on time, but unmistakable terrain features allowed the identification of landing areas by approaching forces. Landing craft also had an issue approaching the beach and soldiers of the 13th RCT were unloaded in knee to waist high water. This was due to the grade of the shoreline and the unwillingness of landing craft crews to risk beaching themselves.¹⁵² Yellow and Blue Beaches were the closest to the coastal road, and, because of this, would remain in use throughout the Sicilian campaign for over-the-shore logistical support. On July 10, 1943, JOSS Force landed 18,464 soldiers, 3,310 vehicles, and 4,714 long tons of supplies, and was the only landing area where the tactical situation was satisfactory.¹⁵³

The assessment of the training and preparation before the JOSS Force landings near Licata were almost opposite of those from Port Lyautey. Truscott and his staff had been preparing for the operation for nearly four months before its execution. Furthermore, Truscott and Conolly were able to train forces together, in near combat conditions, for nearly half that time. Major Robert D. Henriques, a British officer whom Truscott knew from the COHQ joined JOSS Force as an observer in May.¹⁵⁴ Henriques' after action review, published as "A Military Observer," stated,

It is necessary to pay a very high tribute to the unsurpassed and unsurpassable spirit of co-operation and joint endeavor permeating the naval and military forces. It was exhilarating beyond measure to find the two services genuinely fused into a single force with a complete singleness of purpose.¹⁵⁵

Although the relationship between Henriques and Truscott may have shaped this comment, the accounts from different sources regarding the cooperation between Truscott and Conolly support similar assertions. This relationship was important as the two components attempted to address

¹⁵² Morison (1957), 88.

¹⁵³ Garland and Smith, 161.

¹⁵⁴ Truscott, 199.

¹⁵⁵ A Military Observer, 27.

and overcome issues of Operation Torch while planning Operation Husky.

The first issue rectified was that of naval gunfire support. The value of naval gunfire gained a higher regard in the Army since the previous November, as indicated by the inclusion of naval gunfire targets in the planning process.¹⁵⁶ For Truscott and Conolly, the importance of this coordination was in its execution on the first day of the operation. Despite attempts to create and push Naval Gunfire Shore Parties forward with initial waves, these were ultimately ineffective due to teams not waterproofing radio sets properly. For the first four hours of the operation, fire support ships engaged pre-designated targets or those identified by naval spotter planes.¹⁵⁷ At each beach, despite the delay at Red, naval gunfire was essential in destroying defensive positions overlooking the beach from surrounding mountains or quieting inland targets that emerged throughout the morning. It is apparent that Truscott gained an appreciation of the capability of naval gunfire during the training exercises in North Africa and through his close relationship with Conolly. The trust between commanders played the most important role and aided in following the procedures outlined in the current doctrine.

For Truscott and his staff, as well as the staff of Conolly's naval component, the detail required to conduct a shore-to-shore landing surpassed any extant doctrinal. As stated, this was the first shore-to-shore landing by United States forces in the MTO, but with his experience during Operation Jubilee it was not a new concept to Truscott. From that experience and from the inadequacies of the landings at Port Lyautey, the need for deliberate and detailed planning was obvious. At that time, there was no provision in FM 31-5 for shore-to-shore landings, requiring ingenuity and creative thinking by the staffs. The staff made scale models of each ship type and of all equipment types to test loading requirements and begin building landing tables.¹⁵⁸ JOSS

¹⁵⁶ Garland and Smith, 106.

¹⁵⁷ Morison (1957), 89.

¹⁵⁸ Truscott, 201.

Force's final training exercise tested these tables, and the units made necessary adjustments accordingly. Observers noted only one instance where a transportation quartermaster improperly loaded a landing ship by putting wheeled vehicles ahead of tracked vehicles. As a result, there was a thirty-minute delay in downloading equipment.¹⁵⁹ This appears to have been the exception as JOSS Force units executed most of the landings as planned or in accordance with adjustments deemed necessary for unforeseen reasons.

Lastly, Truscott made improvements between the operation at Port Lyautey and those at Licata in regards to controlling landing beaches. JOSS force employed both Beach and Shore Parties integrated into the initial waves of the assault forces.¹⁶⁰ Beach Parties were the responsibility of the naval component and directed landing craft to and from shore. Shore parties maintained organization of the beach once men, vehicles, and other equipment were unloaded. FM 31-5 suggestions the use of each of these organizations, but provides nothing further to direct their employment.¹⁶¹

Together, Truscott and Conolly established procedures and allocated resources during the planning process to address previous shortcomings. Additionally, Seventh Army allocated an Engineer Regiment to JOSS Force to remove obstacles during the initial assault and improve beaches to move men and equipment over the shore in an efficient manner. This capability was not present in the landings of the previous year, but was a capability assault forces needed to maintain momentum and expand the beachhead in preparation for operations further inland.

The 3rd Infantry Division's after-action review of Operation Husky contains many of the same comments. In regards to naval gunfire support and direction, the division had sent nine Shore Fire Control Parties to a ten-day school at the Invasion Training Center. There, the Navy

¹⁵⁹ A Military Observer, 27.

¹⁶⁰ Ibid., 16.

¹⁶¹ FM 31-5 (1941), 26-27.

trained the Parties on fire control procedures, allowed them to direct fire from a ship, and sent them aboard to receive feedback from the ship's gunnery officer.¹⁶² During the planning, there were efforts to train Transportation Quartermasters, including a recommendation to the Invasion Training Center to create a course. This school would "include actual loading and unloading of supplies upon which the troops being trained would depend for subsistence (sic)."¹⁶³ Leaders did not rate this school as effective in the after-action review because of the speed of the training and the eventual turnover of personnel to new duty positions before the landings.¹⁶⁴ There were no comments in the after-action review regarding beach masters, shore parties, or engineer beach groups that went beyond the exceptional performance during the assault during and sustaining subsequent operations. Clearly, Truscott and his staff had learned from the experience at Port Lyautey and, in accordance with the most current doctrine, had made the appropriate adjustments to facilitate operations efficiently.

¹⁶² Third Infantry Division Headquarters, *Report of Operations: Participation of 3rd INF DIV (REIN) in Sicilian Operation (July 10-18, 1943)* (10 September 1943), 57.

¹⁶³ Ibid., 29.

¹⁶⁴ Ibid., 30.

Conclusion

No matter how clearly one thinks, it is impossible to anticipate precisely the character of future conflict. The key is to not be so far off the mark that it becomes impossible to adjust once that character is revealed.

—Sir Michael Howard

Following the initial landings of Operation Torch on the southern coast of Sicily, Truscott and the 3rd Infantry Division would conduct several more assault landings. While conducting operations along the northern coast of Sicily, the Division executed two smaller, tactical amphibious envelopments on short notice and with mixed success. In January 1944, Fifth Army pulled Truscott and the 3rd Infantry Division from the fighting north of Naples to execute Operation Shingle, the assault landings near Anzio, which were very successful on the first day.¹⁶⁵ Following the relief of its commander, Major General John P. Lucas, after the operation stalled, Truscott assumed command of IV Corps at Anzio. With IV Corps, he later led the assault of southern France with Operation Dragoon, citing only one flaw in an “otherwise perfect landing.”¹⁶⁶ The main assault force of Operation Dragoon included three American infantry divisions, each having previous amphibious landing experience and two commanded by former members of Truscott’s 3rd Infantry Division Staff.¹⁶⁷ In total, Truscott participated in or influenced six of the eight large assault-landing operations in the Mediterranean Theater of Operations during World War II. He was one of the most experienced leaders in the US Army in this method of warfare.

¹⁶⁵ Morison (1957), 341.

¹⁶⁶ Truscott, 414.

¹⁶⁷ Also supporting the landing were airborne and glider borne infantry, commando forces, and various Free-French formations. Most interestingly, the commanding Navy officer was Admiral H. Kent Hewitt. Jeffrey J. Clarke and Robert R. Smith, *United States Army in World War II, European Theater of Operations, Riviera to the Rhine* (Washington, DC: Center of Military History, United States Army, 1991), 34-41.

After the Army medically discharged Truscott in 1947, he participated in institutional initiatives to capture the experiences associated with amphibious operations during World War II. He served as the Chairman of the Army Advisory Panel for Amphibious Operations from November 1948 to January 1949.¹⁶⁸ This was one of three advisory panels the Army established by the Committee for Joint Policies and Procedures at the direction of the Joint Chiefs of Staff.¹⁶⁹ The panel submitted three recommendations to the Joint Committee. First, it recommended the establishment of a joint agency to direct all matters of joint amphibious operations and the creation of an amphibious training center under the direction of the Navy. Second, it recommended that the responsibility for any amphibious operations should lay with the service with the dominant interest. Third, the “Army should recognize and assume full responsibility for the development of invasion doctrine to insure that a limited concept of the amphibious operation will not jeopardize fundamental Army functions.”¹⁷⁰ There is no indication that the Joint Staff acted on the first recommendation. In regards to the second and third recommendations, multi-service doctrine indicates continued cooperation and mutual understanding between the Army and Navy in the production and implementation of amphibious landing.

Within the Army, both during and immediately following the war, there is evidence that there were institutional initiatives to capture and spread amphibious landing expertise to either increase or sustain familiarity. Assault landings were commonplace in all theaters of operation during World War II, not just the MTO. However, there are few indications of the existence of a dialogue between the Pacific, European, and Mediterranean Theaters regarding best practices in assault landings. In May 1943, the Army’s ETO Headquarters convened the Conference on Landing Assaults with the main purpose of discussing and studying problems directly related to

¹⁶⁸ Jeffers, 283.

¹⁶⁹ Heffner, 268.

¹⁷⁰ Ibid., 269.

the cross-Channel invasion of France. Many of the topics covered and conclusions reached during the conference echo those made by Truscott and his staff while planning for the invasion of Sicily at approximately the same time. During the conference, participants made suggestions for changes to FM 31-5 for the specific purpose of a cross-channel invasion, but many of them did not appear in the 1944 version.¹⁷¹ This was one of the many methods the Army used to capture requirements to adjust doctrine to meet ongoing operational requirements.¹⁷²

After World War II, the interest in assault landings found support at the Command and General Staff College (C&GSC) at Fort Leavenworth, Kansas. In 1947, nearly 600 students and faculty traveled to Coronado, California, to receive instruction on and observe demonstrations in amphibious operations. Students who had no experience with amphibious operations saw instruction at Fort Leavenworth, primarily in the form of lectures, conferences, and map exercises, as inadequate. Lieutenant General Gerow, the Commandant of the C&GSC, supported the opportunity, and in conjunction with the Commander, Amphibious Force – Pacific Fleet, Rear

¹⁷¹ *The Conference on Landing Assaults, 24 May – 23 June 1943*, brought together subject matter experts and practitioners from the United States and the European Theater of Operations to discuss the issues associated with conducting a cross-channel invasion of France. Organized into four phases, the included in the conference agenda were: orientation, discussion of doctrine, preparation of field exercises, and adaptation of FM 31-5 to Assault Training Center's mission. It included lectures covering different parts of doctrine from the perspective of staff sections, discussions from the group, and conclusions drawn from those discussions. Committees discussed the adequacy of existing doctrine, with recommended changes approved by the larger group. Additionally, participant created a training circular for immediate distribution for units training in England. Records indicate there were thirty-four attendees, many who also presented lectures. Of those attendees, only one represented the United States Marine Corps and the only assault landings discussed from the Pacific Theater of Operations were those on the Aleutian Islands, which were on going at the time of the conference.

¹⁷² Additional methods the Army used to update and maintain doctrine was to position observers in every theater who would return periodically to make reports of observations. These observers also visited training schools. The Army also brought back limited numbers of officers with combat experience back to occupy these positions or instruct at various schools. Virgil Ney, *Evolution of the United States Field Manual: Valley Forge to Vietnam* (Fort Belvoir: Combat Operations Research Group for United States Army Combat Development Command, 1966), 83-84.

Admiral Arthur D. Struble, planned, and organized the event. Gerow deemed the training event a success and recommended its repetition to reinforce the difficulties associated with amphibious operations.¹⁷³ There is no indication that the event occurring again, but the institutional desire to maintain proficiency and familiarity is apparent.

Within the capstone doctrine of the Army, amphibious operations received more attention in the August 1949 version of FM 100-5, *Field Service Regulations – Operations* than in the previous 1944 edition.¹⁷⁴ In the 1954 version, the coverage of amphibious operations increased significantly.¹⁷⁵ However, in that version, FM 31-5 was no longer in the reference section, indicating that the Army may have rescinded it in the interim. The Army adopted of a new series of field manuals in 1951, the 60-series, focusing on different size and type of units conducting amphibious landings.¹⁷⁶

An example of this is FM 60-5, *Amphibious Operations Battalion in Assault Landings*, published in 1951, to serve as a “guide for the training of infantry battalions in the preparation and execution of amphibious operations.”¹⁷⁷ Until 1962, the amphibious landing doctrine was primarily through the Department of the Army and represented a single-service approach. FM 31-11, *Doctrine for Amphibious Operations*, was the first step in publishing a manual for use by multiple services. In addition to the Army, the Navy and Marine Corps also accepted the manual to “set forth the basic doctrine governing the planning for and conduct of all amphibious

¹⁷³ Leonard T. Gerow, *Report to Commander, Army Ground Forces on Amphibious Instruction* (Fort Leavenworth: Command and General Staff College), 28.

¹⁷⁴ Field Manual (FM) 100-5, *Field Service Regulations – Operations* (Washington, DC: United States Government Printing Office, 1949), 233-237.

¹⁷⁵ Field Manual (FM) 100-5, *Field Service Regulations – Operations* (Washington, DC: United States Government Printing Office, 1954), 178-196.

¹⁷⁶ FM 100-5 (1954), 196.

¹⁷⁷ Field Manual (FM) 60-5, *Amphibious Operations Battalion in Assault Landings* (Washington, DC: United States Government Printing Office, 1951), 1.

operations.”¹⁷⁸ Accepted by the Air Force in 1967, FM 31-11 underwent five changes through 1988, after which Joint Publication (JP) 3-02.1, *Joint Doctrine for Landing Force Operations*, replaced it in 1989. Today, the Army Doctrine 2015 concept does not include amphibious operations as either a field manual or an Army Techniques Publication, leaving a gap in knowledge where experience no longer remains.

The definition of doctrine given in ADP 1-01 acknowledges experience and new concepts are the basis of doctrine and that doctrine is the starting point prior to planning or conducting operations. Therefore, the question of whether or not the Army should include amphibious landing operations in current doctrine is relevant.¹⁷⁹ Currently, US Army Training and Doctrine Command Pamphlet 525-3-1, *The US Army Operating Concept: Win in a Complex World*, provides guidance that will shape the development of the Army and its capabilities in the years ahead. Using a similar conceptual framework as the Joint Staff, *Win in a Complex World* states, “Army forces conduct expeditionary operations consistent with the *Joint Operational Access Concept* and the *Joint Concept for Entry Operations*.¹⁸⁰ The role of the Army as described in those documents is somewhat ambiguous, however the need for and reliance on a land component for continuous operations is apparent. Several of the precepts described in the *Joint Operational Access Concept* (JOAC) apply to capabilities associated with amphibious operations. These include, “exploit(ing) advantages in one or more domains to disrupt or destroy enemy anti-access/area-denial capabilities in others”; “creat(ing) pockets or corridors of local domain superiority to penetrate the enemy’s defenses and maintain them as required to accomplish the mission”; and “maneuver(ing) directly against key operational objectives from strategic

¹⁷⁸ Field Manual (FM) 31-11, *Doctrine for Amphibious Operations* (Washington, DC: Departments of the Army and Navy, 1962), xiii.

¹⁷⁹ Ibid., 1-3.

¹⁸⁰ US Army Training and Doctrine Command Pamphlet 525-3-1 (Change 1), *The US Army Operating Concept: Win in a Complex World* (Washington, DC: Department of the Army, 2014), 7.

distance.”¹⁸¹

In *Gaining and Maintaining Access: An Army-Marine Corps Concept*, the Army and Marine agree with the concepts put forward in the JOAC. The services further clarify their role in within the concept, focusing on “defeating area-denial capabilities within the larger context of the joint force effort to gain and maintain operational access,” which “includes the ability to gain entry into contested foreign territory to promote joint force freedom of action.”¹⁸² In this, both services acknowledge their unique capability of entry operations by over-whelming land force, by either air or sea, in the future operating environment. Lastly, *Joint Concept for Entry Operations* references these capabilities, stating the “future Joint Force must be able to enter onto foreign territory and immediately employ capabilities to accomplish assigned missions in the presence of armed opposition, including advanced area denial systems, while overcoming geographic challenges and degraded or austere infrastructure.”¹⁸³ This problem is resembles that of the Allied forces landing in North Africa or Sicily. By late 1942, unlike today, much of the doctrine to support amphibious landing operations existed.

Win in a Complex World and the Joint and Army concepts it supports depict an operational environment requiring multi-domain activities to achieve desired objectives. In many of these domains, there are institutional initiatives to develop the requisite capabilities and individuals are receiving the training necessary to conduct operations in the future. The development of amphibious landing doctrine by the United States Army prior to and during World War II was in response to historical precedents and potential future threats. By observing,

¹⁸¹ *Joint Operational Access Concept* (Washington, DC: Department of Defense, 2012), iii.

¹⁸² *Gaining and Maintaining Access: An Army-Marine Corps Concept* (Washington, DC: US Army Army Capabilities Integration Center and USMC Marine Corps Combat Development Command, 2012), 4.

¹⁸³ *Joint Concept for Entry Operations* (Washington, DC: Department of Defense, 2014), vi.

from the perspective of an influential individual, the application of doctrine supported by limited institutional experience, the problems encountered while doing so, and methods used to overcome those problems, the Army has the potential to avoid similar issues in the future. The Joint Staff published a revision to the existing amphibious landing doctrine, JP 3-02, *Amphibious Operations*, in July 2014, yet there is no indication of the Army developing its own doctrine. The uncertainty of future threats, the lack of institutional knowledge and doctrinal deficiencies in amphibious landing operations places the burden of the Army's success on the Truscotts of the future.

Bibliography

- A Military Observer. *COHQ Bulletin Y/1: Notes on the Planning and Assault Phase of the Sicilian Operation*. Washington, DC: Department of the Army, 1943.
- Allied Force Headquarters. *Lessons of Operations Torch*. Washington, DC: Department of the Army, 1943.
- Army Doctrine Publication 1-01, *Doctrine Primer*. Washington, DC: Headquarters, Department of the Army, 2014.
- Atwater, William F. "United States Army and Navy Development of Joint Landing Operations, 1898-1942." PhD diss., Duke University, 1986.
- Beck, Alfred M., Abe Bortz, Charles W. Lynch, Lida Mayo, and Ralph F. Weld. *United States Army in World War II, The Technical Services, The Corps of Engineers: The War Against Germany*. Washington, DC: Center for Military History, United States Army, 1984.
- Becker, Marshall O. *The Amphibious Training Center: Study Number 22*. Washington, DC: Historical Section, Army Ground Forces, 1946.
- Clarke, Jeffrey J. and Robert R. Smith. *United States Army in World War II, European Theater of Operations, Riviera to the Rhine*. Washington, DC: Center of Military History, United States Army, 1991.
- Committee on Amphibious Operations. *Amphibious Operations: Synopsis*. Washington, DC: National Research Council, 1951.
- Conference on Landing Assaults, 24 May – 23 June 1943*. European Theater of Operations: United States Assault Training Center, 1943.
- Fergusson, Bernard. *The Watery Maze: The Story of Combined Operations*. New York: Holt, Rinehart and Winston, 1961.
- Field Manual 31-5, *Landing Operations on Hostile Shores*. Washington, DC: United States Government Printing Office, 1941.
- Field Manual 31-5, *Landing Operations on Hostile Shores*. Washington, DC: United States Government Printing Office, 1942.
- Field Manual 31-5, *Landing Operations on Hostile Shores*. Washington, DC: United States Government Printing Office, 1944.
- Field Manual 31-11, *Doctrine for Amphibious Operations*. Washington, DC: Departments of the Army and Navy, 1962.
- Field Manual 60-5, *Amphibious Operations Battalion in Assault Landings*. Washington, DC: United States Government Printing Office, 1951.
- Field Manual 100-5, *Field Service Regulations – Operations*. Washington, DC: United States

- Government Printing Office, 1949.
- Field Manual 100-5, *Field Service Regulations – Operations*. Washington, DC: United States Government Printing Office, 1954.
- Fifth Army History, Part I: From Activation to the Fall of Naples*. Italy: Headquarters Fifth Army, 1944.
- Fleet Training Publication 167, *Landing Operations Doctrine*. Washington, DC: Government Printing Office, 1938.
- Gaining and Maintaining Access: An Army-Marine Corps Concept*. Washington, DC: US Army Army Capabilities Integration Center and USMC Marine Corps Combat Development Command, 2012.
- Gaddis, John Lewis. *The Landscape of History: How Historians Map the Past*. New York: Oxford University Press, 2002.
- Garland ,Albert N. and Howard McGraw Smith. *United States Army in World War II, The Mediterranean Theater of Operations: Sicily and the Surrender of Italy*. Washington, DC: Center of Military History, United States Army, 1986.
- Gerow, Leonard T. *Report to Commanding General, Army Ground Forces on Amphibious Instruction*. Fort Leavenworth: Command and General Staff College, 1947.
- Gole, Henry G. *The Road to Rainbow: Army Planning for Global War, 1934-1940*. Annapolis: Naval Institute Press, 2003.
- Heffner, Wilson A. *Dogface Soldier: The Life of Lucian K. Truscott, Jr.* Columbia: University of Missouri Press, 2010.
- Hewitt, H. Kent. *The Memoirs of Admiral H. Kent Hewitt*. Edited by Evelyn M. Cherpak. Newport: Naval War College Press, 2004.
- Howe, George F. *United States Army in World War II, The Mediterranean Theater of Operations, Northwest Africa: Seizing the Initiative in the West*. Washington, DC: Office of the Chief of Military History, 1957.
- Jeffers, H. Paul. *Command of Honor: General Lucian Truscott's Path to Victory in World War II*. New York: NAL Caliber, 2008.
- Joint Board, *Joint Action of the Army and the Navy*. Washington, DC: United States Government Printing Office, 1927.
- Joint Board. *Joint Action of the Army and the Navy*. Washington, DC: United States Government Printing Office, 1936.
- Joint Concept for Entry Operations*. Washington, DC: Department of Defense, 2014.
- Joint Operational Access Concept*. Washington, DC: Department of Defense, 2012.
- Lane, Jack C. *Armed Progressive: General Leonard Wood*. Lincoln: University of Nebraska

- Press, 1978.
- Lorelli, John A. *To Foreign Shores: Amphibious Operations in World War II*. Annapolis: Naval Institute Press, 1995.
- Lubin, Ryan. "Operation Torch: The Planning and Performance of Amphibious Operations in North Africa." Sr. Thesis, Georgia College and State University, 2011.
- Morison, Samuel Eliot. *History of United States Naval Operations in World War II, Volume II: Operations in North African Waters, October 1942 – June 1943*. Boston: Little, Brown and Company, 1947.
- . *History of United States Naval Operations in World War II, Volume IX: Sicily-Salerno-Anzio, January 1943 – June 1944*. Boston: Little, Brown and Company, 1957.
- Morton, Louis. "Interservice Co-operation and Political-Military Collaboration." In *Total War and Cold War: Problems in Civilian Control of the Military*, edited by Harry L. Coles, 131-60. Columbus: Ohio State University Press, 1962.
- Ney, Virgil. *Evolution of the United States Field Manual: Valley Forge to Vietnam*. Fort Belvoir: Combat Operations Research Group for United States Army Combat Development Command, 1966.
- Porch, Douglas. *The Path to Victory: The Mediterranean Theater in World War II*. New York: Farrar, Straus, and Giroux, 2004.
- Russ, Bryant. *75th Rangers*. St. Paul: MBI Publications, 2005.
- Smith, Holland M. "The Development of Amphibious Tactics in the U.S. Navy, Part IV: Training, Experiment, Six Fleet Landing Exercises – 1931-1942." *Marine Corps Gazette* 30, no. 9. September 1946.
- Strassler, Robert B. *The Landmark Thucydides: A Comprehensive Guide to the Peloponnesian War*. New York: Simon & Schuster, 1998.
- Taggart, Donald G. *History of the Third Infantry Division in World War II*. Nashville: Battery Press, 1987.
- Third Infantry Division Headquarters. *Report of Operations: Participation of 3rd INF DIV (REIN) in Sicilian Operation (July 10-18, 1943)*. 10 September 1943.
- Tomlin, Barbara Brooks. *With the Utmost Spirit: Allied Naval Operations in the Mediterranean 1942-1945*. Lexington: University Press of Kentucky, 2004.
- Truscott, Jr., Lucian K. *Command Missions: A Personal Story*. New York: E.P. Dutton and Company, 1954.
- United States Army Training and Doctrine Command (TRADOC) Pamphlet 525-3-1 (Change 1), *The US Army Operating Concept: Win in a Complex World*. Washington, DC: Department of the Army, 2014.
- Vagts, Alfred. *Landing Operations: Strategy, Psychology, Tactics, Politics, From Antiquity to*

1945. Harrisburg: Military Service Publishing Company, 1946.

Whitehouse, Arch. *Amphibious Operations*. Garden City: Double Day and Company, 1963.